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ABSTRACT

Conceived as an educational experiment designed to meet the unique needs of migrant children, Training Migrant Paraprofessionals in Bilingual Mini Head Start is an early education program for children of migrant farm workers. Initiated in 1971, the program has two components: the "Mobile Component" and the "Washington State Component." The "Mobile Component" provides service to children from the home base community of La Grulla, Texas, both in Texas and as the children move with their families to northern states and back again. The "Washington State Component" provides year-round services at two stationary sites for both interstate and intrastate migrants or seasonal farm workers. Three key concepts developed by the program account for the difference in its success and the success of other models of mobile programs: (1) use of adult migrants as teachers, (2) use of a "mini" center concept, and (3) application of "coordinated or supplementary services" concept. This evaluation report discusses the program's progress during the 1974-75 program year. The outcome and process objectives are given along with a summary of findings for the following components: instruction, staff development, parent and community involvement, materials development, and management for interstate delivery system. (NQ)

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EVALUATION OF PROGRESS

TRAINING MIGRANT PARAPROFESSIONALS IN BILINGUAL MINI HEAD START

MID-YEAR EVALUATION
1974-75 Program Year

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INTRODUCTION

TRAINING MIGRANT PARAPROFESSIONALS IN BILINGUAL MINI HEAD START is an early education program for the children of migrant farm workers.

It was funded in response to an invitation by the Division of Bilingual Education of the U.S. Office of Education for projects proposing unique solutions to the special needs of children of migrant families.

The project has two components. The "Mobile Component" provides service to children from the home base community of La Grulla, Texas both in Texas and as the children move with their families to northern states and back again to Texas. The "Washington State Component" provides year-round services at two stationary sites. These provide service to both interstate and intrastate migrants or seasonal farm workers.

The program was initiated in 1971 and is now in its fourth year of operation. This evaluation represents the sixth in a series that have been published on this program.

The grantee is the Intermediate School District 104, Ernest Forge, Superintendent, with offices at Ephrata, Washington.

The project receives funds through the Texas Migrant Council for operation of the preschool portion of the interstate component. These funds are made available by the National Program Desk for Migrants and Indians in the Office of Child Development, Head Start Programs.

The preschool programs which operate year-round in Washington State receive funds from the Division of Social and Health Services utilizing Title IVA of the Social Security Act.

The school-age component, while it operates in Washington State, receives funds from the Office of the Superintendent of Public Instruction, URRD program. The program also utilizes funds provided by private agencies and donors.

A NARRATIVE EVALUATION OF THE MOBILE COMPONENT

This program was conceived as an educational experiment designed to meet the unique needs of children whose parents are migrant farm workers. One of the components of the program has been the "mobile" program. Children from a tiny community near the Rio Grande River in South Texas move every year with their families on a 6,000-mile journey to the north and back again to Texas. We undertook to send teachers with them, and provide educational services on a year-round basis. The following narrative is offered as a perspective view--where the program has come and where it is headed--in developing this unique service approach.

GOAL: To Find An Effective Means of Providing Continuity in the Education of Children Who Move as Interstate Migrants.

All programs for migrant children that serve them in only one location are limited in what they can accomplish by the short period of their service. Most feel that they have the children for so short a time it is not even worth attempting to measure educational gains.

Even the combination of a series of programs a migrant child might attend as he moves from place to place are likely to add up to an unsatisfactory result. The child misses time from school in travel. He misses additional time in getting into the program at any new locations--time to get adjusted to new surroundings, people and methods, and time to take placement tests, and find workbooks he can use. Perhaps the most damaging is the fact that each school is likely to be using different books and different methods, which may result in great confusion in the crucial first years of school when the child is just beginning to understand reading and math.

All of these handicaps above mentioned made it worthwhile to try a mobile program. If successful in following the child from place to place, a mobile program could reach the child during a much longer period than one operating in just one location. If it utilized the same teachers and curriculum and methods, the adjustment time at each new stop could be much reduced. If he learned to read and do math by methods and using material that was the same in Texas as it was in the northern states, the confusion could be much less. All of these seemed like reasons that made it worth trying to manage a relocating interstate delivery system.

During 1969 and 1970 there was a flurry of demonstration programs tried, at the preschool level, to utilize a "mobile" concept in following children from place to place. These programs provided a model of a number of different things that do not work. One attempted by Southwest Educational Laboratory attempted to hire certified teaching staff to move with the children. There

Home base for the mobile program is at La Grulla, Texas. "La Grulla" is the Spanish name for a migratory bird. Like the birds for which the town was named, its inhabitants board up their homes in March or April and approximately 90% of the town's population moves North. Bilingual Mini Head Start teachers are adults from families in which other members are still part of the migrant work force. These teachers move too, to Illinois and to the northwest states of Washington, Oregon, and Idaho.

is such a shortage of bilingual, bicultural, certified teachers that obtaining such staff in any considerable numbers would be impossible. Add to this the disadvantage of the job--the requirement to move self and family during the school year, to live in areas in which housing was extremely short because the migrants used it all, and to work in temporary facilities with a variety of drawbacks, having to pack and unpack teaching materials and locate new suppliers in each temporary stop.

In addition the Southwest Lab program and other mobile programs funded by Head Start for migrants found a common problem in that migrants do not move as a large group. From each location they scatter like quail in many different directions. A "center" with administrative and support staff and two or three teachers could only follow the largest number, and when they moved again follow the largest number again. Each time the service to the original group of children they had started out with in Texas would be less. They could do as the Head Start programs did, and recruit new and different migrant children at each northern stop thereby providing services to migrant children, but not to the same migrant children. Or they could do as the Southwest Lab Mobile Program did and serve only the original group, but fewer and fewer children as the group splintered, until eventually the service group was almost exceeded by the staff.

The greatest percentage of the Texas home base children which were ever picked up again in one or more locations in northern states by these other demonstration programs was 19%. The first year of operation of this program, the Bilingual Mini Head Start, the percentage of children successfully followed from Texas through northern work locations and back to Texas was 72%.

There are three key concepts developed by this program which account for the difference in the success of this program and other models of mobile programs attempted in the past.

(1) Use of adult migrants as teachers. Our teachers are adults recruited from families in which other members are still working in the migrant work force. They are willing to move, and have housing where they move because growers usually provide housing or it is provided in the community for the mobile migrant work force. Perhaps most important of all, they care deeply about the children they are serving and have demonstrated that they are willing to put up with many hardships and inconveniences for the sake of the opportunity the children will receive.

(2) Use of a "mini" center concept. The mini center concept refers to the idea of having a single teacher in an isolated location providing service to from six to ten children. Some of our teachers have ended up working alone, with a few children from the small group of families who have traveled together. Sometimes we use small vans to bus children together so we can

Elia Flores, Teacher. Under the "Mini Center" concept, she moved from La Grulla, Texas to Prescott, Washington. There she served seven children who came to her trailer in the farm labor camp when parents left to work in the asparagus fields, around 5 a.m. She gave the children breakfast, lessons in the bilingual curriculum, and lunch. Parents picked them up again in early afternoon.

Other summers, Mrs. Flores has served children who moved to the Walla Walla Farm Labor Camp. Her "mini center" there was a room in a central day care center. She served children we are following in groups at different times of the day, and they then joined other children in the day care center or were bussed into town for school.

The child pictured above is David Zarate, in the program from 1972 to 1975. He has attended the program in La Grulla and for two summers in Hoopeston, Illinois where his "mini center" teacher from La Grulla was Mrs. Maria Louisa Mendoza.

The project has successfully followed over 70% of the children it serves in La Grulla to their northern work locations during two different years of project operations. The highest rate of continuity achieved by any other mobile program has been 19%.

have two or three teachers working together. But the fact that we can splinter and move in almost as many directions as the families we serve in Texas has been the key to successful following of children.

(3) Application of "coordinated or supplementary services" concept. In each location, if there is a preschool program available we have attempted to integrate our program with it. In most cases this has amounted to enrolling our children in the other program, and having our teacher work under their administration with the provision that a certain period of the day the children we are following will be allowed to spend time with our mobile teacher who gives them the bilingual curriculum. We also require that our teacher be allowed time to participate in training whenever we are able to have a trainer come to that location (trainers have an itinerant schedule, moving from location to location during the mobile months).

Eloisa Garza, teaching school-age children at Mabton, Washington. She had some children from the group we follow from La Grulla, some others referred by the local school. In Texas she teaches children who come for two hours released time from their regular first grade class. These children, when they move north, will be using the same books and methods as in Texas because of the mobile program.

For school-age children, during the regular school year, or in the summer if the local school has a special summer school program for migrants, children again enroll in the local program. We explain to their administrators our purpose in having staff following these children and ask permission to have our staff member work at the school, continuing our basic bilingual curriculum on a released time basis. If this is not satisfactory we can work with the children after school, and even at another location.

The child may receive reading and math from the regular school, and again from our teacher, but the curriculum services he receives from our program have an advantage in minimizing time lost because of relocation. We have the means to swiftly place the child in the materials where he left off, and to test him over materials he has covered to catch anything he has forgotten during the move and needs to remediate. In the basic series we are using

When children move, it is expected that they will "forget" some concepts they have learned. The program has developed achievement tests to go with every curriculum area which allow the child to be retested over material he has covered. Individual children are then tutored on concepts on which they need remediation. All teachers are familiar with the "summer vacation" set-back. Migrant children who move again and again re-experience this kind of backtracking. Having a means to do selective review is very important to a migrant program.

he gets reading and math skills utilizing the same materials and methods from one school location to the next. What he receives from the local school becomes supplementary practice--a double dose of the basic academic areas.

Our teachers also provide lessons that are not usually in the local program--language lessons in both Spanish and English, and cultural heritage activities.

The school-age component of our program just got started last summer. We do not have much experience with it yet. But our limited experience is that it has been welcomed by the "host" schools. For the most part the school has arranged facilities for

use of our teacher(s) and worked out released time for children to receive the supplementary lessons during the school day. In most cases they have asked, in return, that we tutor additional children who they are not adequately reaching because of language barriers. Repeatedly, the suggestion has come up that we take these referral children instead of the children we are following because the children in our program are often making much better progress than others. We have resisted this feeling that we want to fully test the potential of following migrant children through two or three early grades of school to see what their full potential can be.

Aniceto Zarate, "circulating" a small group, giving individualized instruction. All curriculum materials selected had to be the kind that allowed for individualized progress. When they move, the "tracking system" will allow continuation with a minimum of loss of progress.

Where is it leading? The program has not yet reached the point where it can be replicated by other agencies. We need more experience with the school-age program--how best to work out the logistics, and the integration with other services. This past winter we obtained tests on two control groups which will give us a baseline to measure the effectiveness of following the children in our project group. Our first full year of operation of the school-age program will come about by the fall of 1975 and we can then assess the educational advantage of the mobile program. So far we only have kindergarten and first grade children. We mean to add second, and possibly third grade.

The biggest drawback to replication is a funding source. The largest allocation of money in the United States for the benefit of migrant children is Title I-Migrant. This source of funding exceeds 60 million dollars. At the moment it cannot be used for a program such as ours, no matter how great our proof of effectiveness. This is because Title I must, by law, be allocated to states, who in turn allocate it to local educational agencies. No part of the money is reserved for special purposes such as an interstate program. Although there is one large interstate project--the migrant record transfer system, its funding required the consent of every state participating and each one funds its proportionate share of this program.

It has been suggested that communities in states all along the way might combine to jointly fund their portion of a mobile program such as ours. As the lead time for applying for local programs runs about a year (the state first determines priorities, then gets local applications, reviews them, etc.) this would require parallel programs being put together by a dozen or so different agencies--not a likely possibility. It would lack flexibility because of the long lead time--our experience is that each year our mobile sites have changed. Usually we have had very little notice of this change.

We have succeeded only once in getting a small grant through Title I. This required us to make application through Rio Grande School District in Texas, who applied to the Texas Education Agency who then gave the grant to the Rio Grande School District. They, in turn, made Intermediate School District 104 (located in Ephrata, Washington) a delegate agency to operate a program in La Grulla, Texas (the funds could be spent only during that part of the year the program operated in Texas). Because Rio Grande School District has a different salary schedule, we had to come up with a justification for the fact that our salaries did not exactly coincide with the salary schedule they used. We had to duplicate all fiscal records so the expenditures could be audited in Texas as well as in Washington State. These are typical problems when it comes to overlapping funding agencies.

Title VII funds do not have this limitation on interstate programs--or did not when we first applied. Since then it has become increasingly difficult to meet their requirements. This last application it was required that we get a sign-off from every school district with which we overlapped in a long-term site--the Rio Grande School District in Texas and with two other intermediate school districts in Washington State. We have succeeded in working out a good relationship with all these agencies, but the administrative time increases as we are obliged to develop proposals which carry a heavier and heavier load of coordinative steps.

At present the largest source of money for migrant education is Title I-Migrant. Current restrictions on funding channels prevent Title I from being spent for an interstate program such as this one. The funding and administrative structure that makes this program possible is a Rube-Goldberg invention with only one redeeming quality--it works, and the children are making outstanding progress.

We have succeeded in getting migrant Head Starts funds for the preschool level (only) of the mobile program. We have picked up URRD Washington State funding for the school-age part of the mobile component, when it is in Washington State (only). We have obtained Social Security Title IV funds for the preschool part (only) of the permanent centers in Washington State, and URRD funds for the school-age portion of this program. However, the intermediate school district was not eligible to apply for URRD funds, so we have had to obtain the cooperation of Mabton local school district for these grants. They have made the intermediate school district a delegate agency to run the program. Because the board of the intermediate school district is established by law, Migrant Head Start has preferred to place their grant with a non-profit agency in which migrants have a major place in board membership. This

Because teachers must work on their own in isolated areas after being in training in Texas only a few months, training is intensive. The training has the teaching skills modeled by trainers, who are certified teachers. Then teachers are observed two or more times with the trainer following an observation instrument. She then conferences with the teacher, as in the picture above. Instructional gains with paraprofessional teachers working with intermittent supervision have justified the effectiveness of this type of staff when given this type of training.

has meant the mobile component has had to be operated with a joint management with the Texas Migrant Council. The mobile teachers, when they go to other states such as Idaho or Oregon are paid from the Title VII grant. But Title VII will not allow any funds for rent, for food services, or for transportation so if these have become needs in the other states, a different source of funds has been required. In summary, we have kept the program alive through superhuman efforts and ingenuity in combining funding sources. We have come through audits with all our separate accounts in order and none overspent.

What is needed is a change in Title I laws. Head Start also, originally, allowed funds to be spent only through local agencies. When it was discovered that this "catch them where they light" system was usually not reaching migrant children, the allocation of Head Start funds was changed. A sum of money was set aside for migrants, and administered from Washington D.C. where it could be used to serve the children

Rewards for hard work during lesson period include such activities as using the typewriter as in the picture above. Or a game of "Old Maid" with the teacher, as in the picture below. Children are motivated by these change of pace activities which are included in the regular scheduling.

wherever they are or wherever they moved and several interstate programs have resulted especially designed to meet migrant needs.

If Title I Migrant which can serve school-age or preschool children could similarly set aside a portion of its total grant allocation for use in special programs including interstate efforts such as this one, it could make possible immediate extension of the program model we have developed.

Title I would also need to amend policies in a few other ways. For one, it would have to be allowable to have a paraprofessional such as our migrant teachers working by themselves. Now several states require that a paraprofessional work under the immediate supervision of a certified teacher, and define "immediate supervision" as on the premises, rather than the intermittent overseeing which our certified teacher-trainers are able to give during the mobile phase. The policies would also have to allow some reasonable overlap, as this type of program by definition overlaps local efforts wherever it moves. The justification for this overlap would seem to be that we have tried the other system for years--uncoordinated efforts from each local school district--and they have not worked, or have not worked well enough.

A mobile program has other advantages. The salary benefits go to true migrant families. Nearly all other programs deliberately hire their staff from people who are not migrant, in order to train them and be ready when the "migrants" arrive. A few migrants are hired, but they seldom have anything like the "career development" opportunities this program offers, because a local program is by definition "short term" and continued training and advancement is only possible through year-round employment and training. In "home base" our program teachers have put year-round salaries into the migrant community, giving a stability to the lives of not only our teachers, but because of close relationships between families, to other families near them. Many of our teachers were adults who had left school before high school. Nearly all have completed a GED and gone on for college training. All of the children enrolled have benefited enormously as is clearly documented by the instructional component findings that follow in this report.

In summary, the mobile component of this program has worked. We are building an ever more convincing case for the educational benefits which can follow from use of adult migrants as teachers who serve migrant children as they move. At the present, however, the single largest source of money which should be available for the benefit of migrant children cannot be used for this type of interstate program. The end goal of this demonstration would seem to be, therefore, presentation of the evidence hoping for legislative and administrative policy changes so that a program that makes great sense for migrant children can be funded through migrant education monies.

Child being tested in Spanish and in English on Peabody Picture Vocabulary Test.

Most education programs pre- and posttest on calendar dates. Children in migrant education programs come and go so irregularly that these tests are often meaningless. Few of the children post-tested may have been present at the time pretests were given. Or else the posttest measures effectiveness of very different periods of program participation. Many migrant education programs give up evaluation altogether because they assume it is useless to measure such a short period of educational intervention.

This program developed a system to overcome erratic attendance. Each child is tested when he enters the program, within 30 days. He is then retested after each 100 days of attendance, based on the record kept individually of each child's cumulative attendance. This means the program is testing throughout the year, but when the tests are pulled together for analysis by age groups, each test represents comparable periods of program participation.

The success of the program in finding a way to meaningfully evaluate migrant children's educational progress earned the program recognition in the National Education Fair in 1973. The U.S. Office of Education has also included it in a list of programs recommended as possible "dissemination" models to other educational agencies, on a list published in 1974.

1.0 INSTRUCTIONAL COMPONENT

1. How Well Are Children Learning Preschool Concepts?

GOAL: Project students demonstrate growth in understanding of preschool concepts as measured by the Cooperative Preschool Inventory.

ANALYSIS: Children are tested individually, in their primary language. Pretests are given before the child has attended the program for 30 days. Attendance is kept cumulatively on each child, and retests administered each time the child passes a 100-day interval.

The project started using this test in November of 1973. The test scores used in the analysis are cumulative since that date. (This represents a small change in the evaluation design which originally anticipated using only scores during the six-month interval preceding the evaluation. The number of cases available from this period was not sufficient for valid statistical analysis, so the larger sample was used.)

Children's tests are grouped by age, and then subgrouped by the period of attendance in the program. The "norm" group consists of test scores of all children pretested before their 30th day in the program. Program effect would be minimal within this time limit. The "norm" group scores, therefore, represent the probable score of children within this target group, without benefit of this educational program.

Children classified as "100 day" attendance are tested as closely as possible to their 100th day in the program. In any event, this subgroup goes up to, but does not include children ranked as "200 day" attendance. The attendance categories are mutually exclusive, unless the designation has a plus after it. A subgroup listed as "300+ days" would include all those in the 300-day attendance group, plus children in 400 or 500, etc., attendance groups. The "plus" designates all children with at least this amount of attendance, when the combining of attendance groups is necessary to provide a sufficient sample size for statistical analysis.

The average (or mean) score for each subgroup is calculated and a comparison made. The national percentile is from the mean score of subgroups, and is based on the national norms published for this test. Statistical significance is calculated by the standard formula for a "t" test comparing the means of small, unequal samples.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: The criteria is met if the mean score of each subgroup by age with 100 or more days attendance is greater than that of the norm group of comparable age, and if the mean score increases with each period of attendance. (Analysis limited to subgroups of six or more children.)

FINDINGS: The table below compares the average (mean) raw score on the Cooperative Preschool Inventory test by project students of comparable age, who have attended for different periods of time. It shows the difference between the norm group score and the mean scores of all subgroups who have attended more than 100 days. It indicates if this difference shows an increase with the longer periods of attendance, in keeping with the project objective. The final column shows whether the difference between the norm group score and the score of children with longer periods of attendance is enough to be statistically significant. In other words, significance at the .05 level would mean that this difference could be the result of chance less than five times in 100. Significance at the .01 level would mean that the difference could occur by chance less than one time in 100.

TABLE 1

COMPARISON OF MEAN RAW SCORES ON COOPERATIVE PRESCHOOL INVENTORY BY PROJECT STUDENTS WITH DIFFERENT PERIODS OF PROJECT ATTENDANCE

Attendance by Age Group	Number	Avg. (Mean) Raw Score	Difference From Norm Group Mean	Does Score Increase With Longer Attendance?	Is Difference From Norm Group Enough to be Statistically Significant?
Age Group 3.0-3.11					
Norm group Under 30 days	N=44	21.86	. .	. .	. .
100 days	N=19	22.89	1.03	Yes	Not sig.
200 days	N=6	31.50	9.64	Yes	Sig. .01 level
Age group 4.0-4.11					
Norm group Under 30 days	N=30	31.87	. .	. .	. .
100 days	N=36	35.22	3.35	Yes	Not sig.
200 days	N=21	39.00	7.13	Yes	Sig. .05 level
300+ days	N=21	43.90	12.03	Yes	Sig. .01 level
Age group 5.0-6.5					
Norm group Under 30 days	N=12	43.08	. .	. .	. .
100 days	N=25	47.72	4.64	Yes	Not sig.
200 days	N=30	48.73	5.65	Yes	Not sig.
300+ days	N=42	51.17	8.09	Yes	Sig. .01 level

SUMMARY OF FINDINGS, TABLE 1: To summarize some of the findings presented on Table 1:

1. The average score of project students after 100 days attendance is higher than the norm group of children the same age in every case.
2. The continued increase in scores with each additional period of 100 days attended, indicates that children's understanding of these preschool concepts benefits from longer participation.
3. By 200 days attendance preschool children age three and four are significantly superior to children the same age from the target group who are just enrolling in the program.

ADDITIONAL FINDINGS: The Cooperative Preschool Inventory is a nationally standardized test, so it is possible to compare the scores of project children with a national norm group. Figure 1 which follows converts the mean raw score for the various age and attendance subgroups to a "national percentile." This percentile indicates what percentage of children in the national sample scored lower on this test. For example, the average score of the norm group of children in this project who are three years old is 22 correct answers (out of 64). A score of 22 for three-year-old children is at the 40th percentile. This indicates that in the national sample 40% of children scored even lower than this, and 60% scored higher.

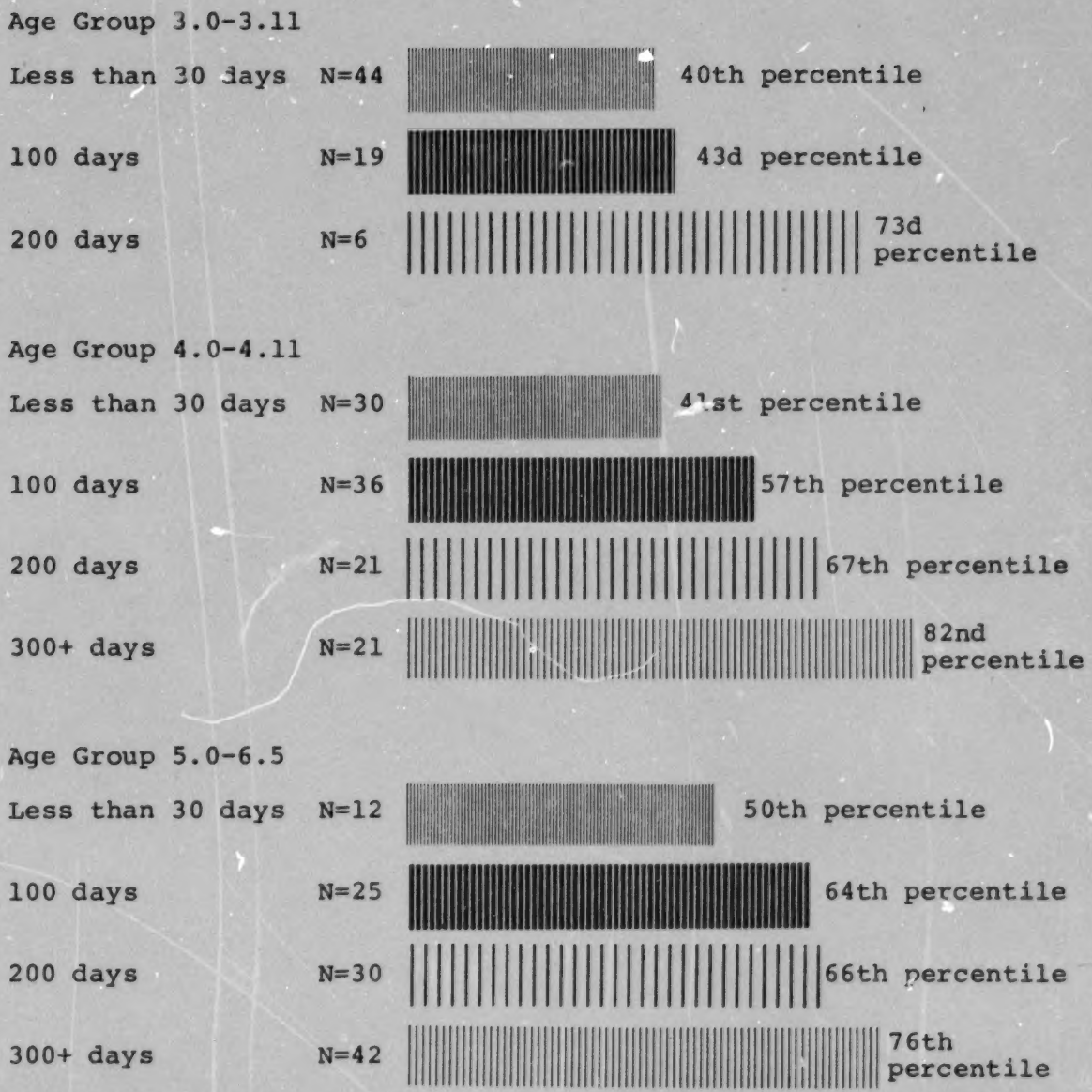


Fig. 1.--Comparison of National Percentile Ranking on Cooperative Preschool Inventory by Project Students with Different Periods of Project Attendance.

SUMMARY OF FINDINGS, FIGURE 1: To summarize the findings presented in Fig. 1:

1. Children in the target group, without benefit of the program, tend to score in the bottom 50% compared to children in the national sample.
2. After 200 days in the project, the average score of children rises to the upper one-third of children in the national sample.
3. After 300 days in the project, the average score of children ranks in the upper 25% of children in the national sample.

ADDITIONAL FINDINGS: Perhaps the "toughest" evaluation question that can be asked of any program is: "What does it do for the lowest scoring students"? Figure 2, which follows, attempts to answer that question. For each age group it shows the number and percentage of children whose individual scores would rank them in the lowest 25% of children, based on the national sample. It shows how this number and percentage of children in this lower quartile decreases for project children who have attended the program for 100- and 200-day periods.

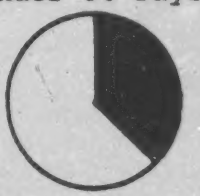
	Attendance Categories		
Age Group 3.0-3.11	Norm Group Under 30 Days	100 Days	200 Days
			
Number in Group:	N=45	N=19	N=16
Number and Percentage Scoring in Lowest 25% by National Norms:	16/45 36%	5/19 26%	0/16 0%
Age Group 4.0-4.11	Norm Group Under 30 Days	100 Days	200 Days
Number in Group:	N=30	N=36	N=21
Ratio and Percentage Scoring in Lowest 25% by National Norms:	10/30 33%	3/36 8%	0/21 0%
Age Group 5.0-6.5	Under 30 Days	100 Days	200 Days
Number in Group:	N=12	N=25	N=30
Ratio and Percentage Scoring in Lowest 20% by National Norms:	1/12 8%	1/25 4%	0/30 0%

Fig. 2.--Comparison of the Number and Percentage of Children (By Age and Period of Attendance in Program) Whose Scores Rank Them in the Lowest Quartile by National Norms.

SUMMARY OF FINDINGS, FIGURE 2: To summarize the findings presented in Fig. 2:

1. Nearly one-third of the project preschool children, age three and four, score in this lowest quartile before they have had benefit of the educational program offered by this project.
2. After 100 days attendance the percentage of children in this lowest quartile has decreased for every age group.
3. After 200 days attendance in the program, no children are still scoring in the lowest quartile. In summary, the program is quite effective in raising the scores of even the lowest ranking children in the project.

CONCLUSION: The project objective was that the average score of children on the Cooperative Preschool Inventory would show an increase after each 100-day period of attendance. The findings presented here indicate that this objective was met. Additional analysis warrants the further conclusion that the program is effective even with the children who enter the program in the lowest scoring category. The superiority of project students passes the test of "statistical significance" beyond the level of chance for three- and four-year-old children after 200 days attendance, and with kindergarten age children, after a period of 300 days attendance.

2. How Well Have Children Learned Two Languages?

GOAL: Project students demonstrate growth in language understanding in both Spanish and English as measured by the Peabody Picture Vocabulary Test.

ANALYSIS: Children are tested individually, using Form A of the Peabody Picture Vocabulary Test in English, and Form B in Spanish. Pretests are given before the child has attended the program for 30 days. Attendance is kept cumulatively for each child and retests given after each 100-day attendance interval. Tests representing the various attendance intervals are grouped for analysis at evaluation dates.

Gains analysis is based on the raw score gain from the previous test to the present test (approximately a 100-day attendance period). Each evaluation reports on children post-tested at any time during a six-month calendar period preceding the date of the evaluation. This evaluation is labeled "Wave 5" to distinguish it from previous evaluation groups. It consists of children who passed a testing point between April 1 and September 30, 1974. "Gains analysis" consists of making a roster of children in the Wave 5 evaluation group. Each child's gain or loss is recorded, separately for his "primary" and his "second" language. "Primary" language is considered to be the language on which he received the highest total score based on the last test given. The percentage of the evaluation group with a gain of 5 or more points is then determined to see if the project objective has been met.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: The criterion is met if the percentage of children meeting the 5-point gain standard is greater than 50% in both primary and second language.

FINDINGS: Table 2, which follows, reports the number and percentage of children who gained 5 points or more in their raw scores, classified by whether the gain was in their primary or in their second language.

TABLE 2

GAINS IN ENGLISH AND SPANISH RAW SCORES ON THE PEABODY PICTURE VOCABULARY TEST BY PROJECT STUDENTS AFTER APPROXIMATELY 100 DAYS ATTENDANCE INTERVAL BETWEEN TESTS

Number in Test Group	Number with Over 5 Points Gain	Percentage Over 5 Points Gain	Meets Project Goal?	Average Point Gain
Gains in Primary Language:				
67	38	57%	Yes	8.58
Gains in Second Language:				
66	27	41%	No	4.98

SUMMARY OF FINDINGS, TABLE 2:

1. THE MAJORITY OF PROJECT STUDENTS SHOWED A LANGUAGE GAIN IN THEIR PRIMARY LANGUAGE WHICH EXCEEDED THE PROJECT GOAL.
2. THE AVERAGE GAIN IN PRIMARY LANGUAGE WAS 50% HIGHER THAN THE 5-POINT GAIN SET AS A GOAL.
3. THE AVERAGE GAIN BY CHILDREN IN THEIR SECOND LANGUAGE WAS 4.98 POINTS, VERY CLOSE TO THE 5.00 POINT GOAL. HOWEVER, THE PERCENTAGE OF CHILDREN MAKING THIS MUCH GAIN WAS LESS THAN 50% OF THE TOTAL GROUP TESTED.

INTERPRETATION OF FINDINGS: The "5 point gain" established as an arbitrary goal was based on the fact that on this test, between ages three and six, this represents approximately the "expected" increase a child would make in a six-month period based on national norms for this test. The greatest number of project children complete a 100-day period of attendance within a six-month period, so this represents a rough standard of "normal" language development, and a gain exceeding the 5-point standard would represent a somewhat accelerated language development.

There is no reasonable basis for "expecting" any amount of gain in a child's second language, so the same gain standard was set on an arbitrary basis. Its primary value is in allowing the project to see whether the "rate" of second language development is increasing from one evaluation period of six months, to the next, as changes are made in the curriculum.

The record of second language gains for the past three evaluations is as follows:

	Percentage of Children Gaining 5 Points or More in Their Second Language
A. Mid-year evaluation 1973-74 program year:	29%
B. End-of-year evaluation 1973-74 program year:	41%
C. Mid-year evaluation 1974-75 program year (this evaluation):	41%

After the evaluation labeled "A" above, the educational director developed a training unit on dual language teaching which he carried out at all centers. An observation instrument for use by trainers on dual language teaching was also put into use. The benefits of these efforts seem to be reflected in the findings above.

Site visits were also started to other programs in search of more effective curriculum for the development of second language skills. In April, 1974, the decision was made to adopt the DISTAR language development program, using it bilingually based on the Spanish version developed at East Las Vegas, New Mexico and Uvalde, Texas.

Materials were ordered, training consultants brought in, and implementation began in mid-summer at the two permanent centers in Washington State. The Texas based program was, by then, in its mobile phase. It is extremely difficult to introduce new curriculum materials while teachers are dispersed in six or eight different locations, many teachers providing services working alone in isolated areas with intermittent support from training staff who travel from site to site. It was therefore decided to have the mobile project teachers who were in Washington State (other teachers were in Oregon and Illinois) attend

training on the new curriculum during the summer, but full training and implementation of the new curriculum was not undertaken until the fall of 1974 when the program resumed operations in Grulla, Texas.

As the group of children reported in this evaluation "Wave" were tested between April and September, 1974, it therefore represents a "transition" period. Some of the children in this evaluation group had been into the new curriculum for a few weeks at the time they were tested; most had no experience with it. The effects of the new curriculum will not begin to be measured, therefore, until the end of program year evaluation for 1974-75. As the program is finding extensive revision necessary with the materials to adapt them to our use, the effectiveness will not be clear until two or three evaluation periods have passed.

ADDITIONAL FINDINGS: A longer term evaluation analysis on language gains was undertaken for this report beyond that required by the evaluation design. The first part was to answer the following question:

> How well is this program doing in helping Spanish speaking children retain and improve their skills in their primary language?

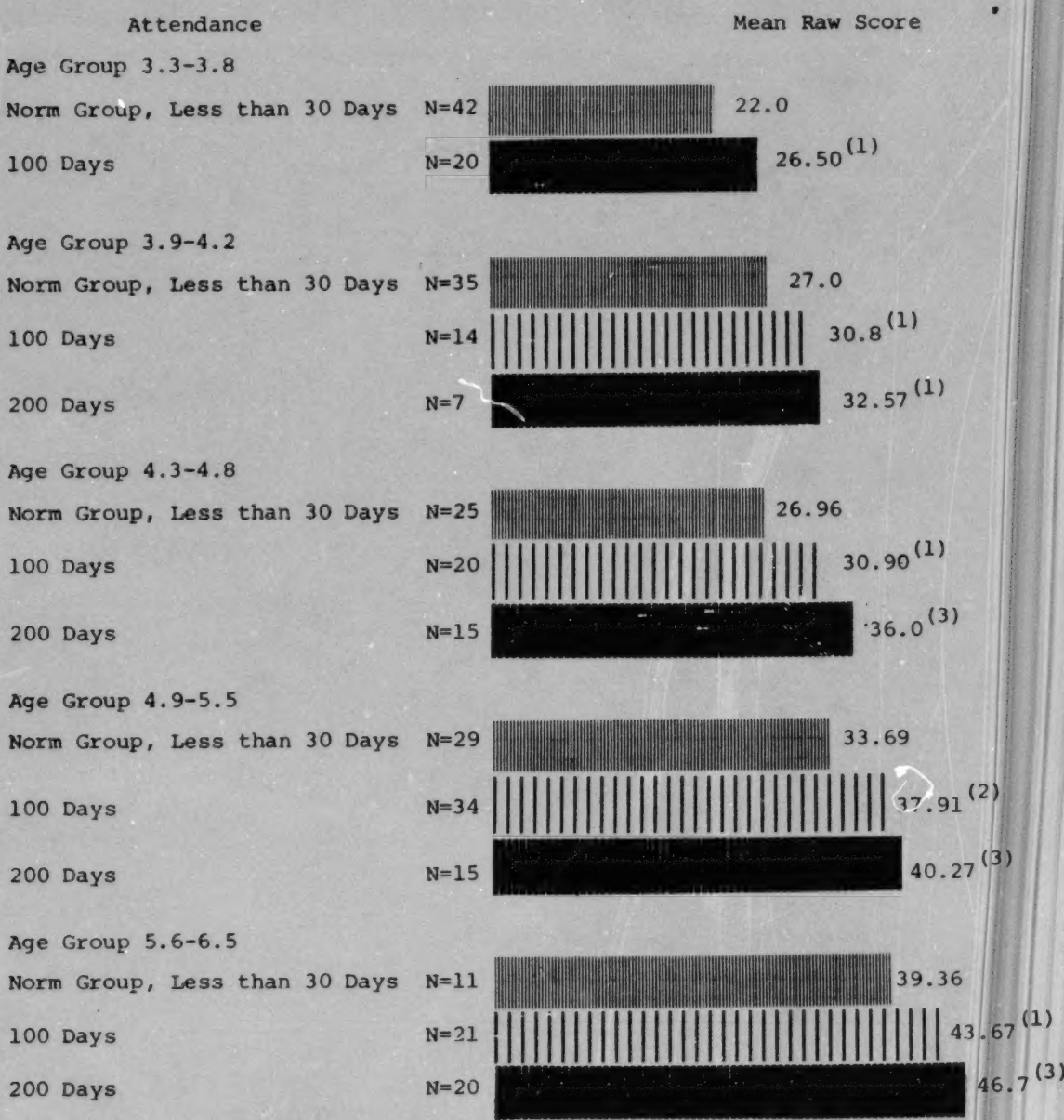
This has been one of the long-term goals of the program. Until the recent rekindling of interest in bilingual education, most Spanish speaking children have been forced into English-only classrooms, in which their native language skills were neglected, even sometimes punished. Academic instruction and cultural enrichment activities in this program are carried out in both languages. This is in addition to the portion of the academic day related directly to "teaching" language as a subject area.

When preschool children first enroll in this program, the level of their language skill represents home usage, rather than the language of instruction. In the past three years the accumulated scores of children pretested as they entered the program represents a "norm group" of the level of language skills characteristic of this target group before they participate in the program. For this evaluation the scores of all Spanish dominant children pretested before 30 days in the program and those who have attended 100, 200, and 300 or more days were

accumulated and analyzed based on the child's age at the time of testing. If the project was meeting its long term goal, each successive period of attendance should result in a higher average score in Spanish for Spanish speaking children. This would mean that participation in the program was giving the children a stronger communication ability in Spanish than children of their age without benefit from such a program.

This three-year analysis of test scores of Spanish dominant children confirms this result. Each attendance period results in a widening gap by which project children are superior to children of their age before program participation. These findings are presented in detail in Fig. 3, which follows.

Fig. 3.--Comparison of Average (Mean) Scores in Spanish, Measured by the Peabody Picture Vocabulary Test, of Project Students for Whom Spanish is the Primary Language, by Different Periods of Project Attendance


Attendance
Mean Raw Score
Age Group 3.3-3.8
Norm Group, Less than 30 Days N=42 22.0
100 Days N=20 26.50(1)
Age Group 3.9-4.2
Norm Group, Less than 30 Days N=35 27.0
100 Days N=14 30.8(1)
200 Days N=7 32.57(1)
Age Group 4.3-4.8
Norm Group, Less than 30 Days N=25 26.96
100 Days N=20 30.90(1)
200 Days N=15 36.0(3)
Age Group 4.9-5.5
Norm Group, Less than 30 Days N=29 33.69
100 Days N=34 37.91(2)
200 Days N=15 40.27(3)
Age Group 5.6-6.5
Norm Group, Less than 30 Days N=11 39.36
100 Days N=21 43.67(1)
200 Days N=20 46.7(3)

(1) Although the difference between this score and that of the norm group for this age is in the direction called for in the project objective, it is not sufficiently large to be statistically significant.

(2) The difference of this score over that of the norm group for this age level is sufficiently large to be statistically significant at the .05 level (e.g., it would occur by chance less than five times in 100).

(3) The difference of this score over that of the norm group for this age level is sufficiently large to be statistically significant at the .01 level (e.g., this difference would occur by chance less than one time in 100).

SUMMARY OF FINDINGS, FIGURE 3:

1. AFTER 100 DAYS IN THE PROGRAM, THE AVERAGE SCORE OF CHILDREN IN EVERY AGE CLASSIFICATION IS HIGHER THAN THAT OF THE NORM GROUP.
2. FOR CHILDREN OF THE AGE TO ENTER KINDERGARTEN (4.9-5.5) THE SUPERIORITY OF THE CHILDREN WITH 100 DAYS ATTENDANCE OVER THE NORM GROUP IS ENOUGH TO BE STATISTICALLY SIGNIFICANT ABOVE A RESULT THAT MIGHT HAVE COME ABOUT BY CHANCE (THE .05 LEVEL OF SIGNIFICANCE).
3. FOR CHILDREN IN THE AGE GROUPS FROM 4.3 TO 6.5 THE SUPERIORITY OF PROJECT CHILDREN AFTER 200 DAYS ATTENDANCE IS EVEN GREATER, ENOUGH TO BE STATISTICALLY SIGNIFICANT AT THE .01 LEVEL WHICH MEANS THAT THE PROBABILITY THAT THIS MUCH DIFFERENCE COULD BE ATTRIBUTED TO CHANCE IS LESS THAN ONE IN 100.

ADDITIONAL FINDINGS: The Peabody Picture Vocabulary Test scores from the last three years were analyzed in another way to answer the following evaluation question:

> How well has the program succeeded in helping Spanish speaking children learn English?

This is another of the goals of the program; to give Spanish speaking children enough knowledge of English so they can benefit from instruction in either language.

To answer this question, analysis was made of all children who had been in the program for 200 or more days and who were tested as "Spanish dominant" at the time they entered. There were 75 children in this group. Out of these, 50 would be classified as "monolingual" Spanish speakers at the time they entered the program. These are children who come from homes in which there is little or no use of English to reinforce what the children learn in the program. The remaining 25 children entered the

program with Spanish as the dominant language, but with English scores at least 50% or better as high as their scores in Spanish. On this basis they would be classified as having a bilingual capability on program entry. In the homes of these children there is some use of both languages.

The following table analyzes the range and distribution of gains made by these children within their first 200 days attendance in the program. As the project goal for each evaluation during this period has been a minimum of 5 points gain per 100 days attendance, a 10 point gain is taken as the gain goal for 200 days.

TABLE 3

RAW SCORE GAIN IN ENGLISH ON PEABODY PICTURE VOCABULARY TEST, AFTER 200 DAYS ATTENDANCE IN PROGRAM, BY CHILDREN WHOSE PRIMARY LANGUAGE AT ENTRY WAS SPANISH

Points Gained	Bilingual Group* Number = 25	Monolingual Group* Number = 50	Both Groups Combined Number = 75
0	1 (4%)	8 (16%)	9 (12%)
1-9	7 (28%)	16 (32%)	23 (31%)
10-20	6 (24%)	12 (24%)	18 (24%)
21+	11 (44%)	14 (28%)	25 (33%)
Number and Percentage of Children Gaining 10 Points or More in 200 Days Attendance, to Meet Project Goal			
	17 (68%)	26 (52%)	43 (57%)

*Bilingual group is children whose score in English is at least 50% as high as their score in Spanish at the time of initial enrollment. Monolingual group is children with scores in English less than 50% of their score in Spanish (usually a very negligible score).

SUMMARY OF FINDINGS, TABLE 3:

1. DURING THREE YEARS OF PROGRAM OPERATIONS THE GAINS IN ENGLISH OF SPANISH SPEAKING CHILDREN HAVE MET THE PROJECT GOAL OF 10 POINTS OR MORE GAIN IN 200 DAYS ATTENDANCE FOR 57% OF THE CHILDREN.

2. CHILDREN RANKED AS HAVING SOME BILINGUAL CAPABILITY ON INITIAL ENROLLMENT MADE PROPORTIONATELY LARGER GAINS IN ENGLISH THAN CHILDREN RANKED AS MONOLINGUAL SPANISH SPEAKERS ON ENTRY.
3. EVEN THE GROUP OF CHILDREN INITIALLY IDENTIFIED AS MONOLINGUAL SPANISH SPEAKERS MADE GAINS SUFFICIENT IN ENGLISH TO MEET THE PROJECT GOAL FOR 52% OF THE CHILDREN.

The scores of these 75 children were analyzed in a different way to show the change in their language classification as their English skills have increased through program participation. For this purpose their initial test scores are compared to their scores on their latest test, on Table 4.

TABLE 4

LANGUAGE CLASSIFICATION OF CHILDREN WHO WERE SPANISH DOMINANT UPON INITIAL ENROLLMENT IN THE PROGRAM WHO HAVE ATTENDED THE PROGRAM AT LEAST 200 DAYS

	On Entry to Program	On Latest Test
Total number in group	75	75
Children whose score* in English is equal to or greater than their score in Spanish	. .	24 (32%)
Children whose score in English is at least 50% of their score in Spanish	25 (33%)	28 (37%)
Children whose score in English is less than 50% of their score in Spanish but is 10 points or more	9 (12%)	20 (27%)
Children whose score in English is considered negligible, being 9 points or less	41 (55%)	3 (4%)

*Scores are from the Peabody Picture Vocabulary Test.

SUMMARY OF FINDINGS, TABLE 4:

1. OF THE 55% OF CHILDREN WHO HAD "NEGLIGIBLE" SCORES IN ENGLISH UPON ENTRY TO THE PROGRAM, ONLY 4% REMAIN IN THAT CATEGORY AFTER 200 OR MORE DAYS PARTICIPATION IN THE BILINGUAL PROGRAM.
2. NEARLY ONE-THIRD (32%) OF THE CHILDREN ORIGINALLY CLASSIFIED AS SPANISH DOMINANT NOW HAVE AN EQUAL OR GREATER CAPABILITY IN ENGLISH.
3. THE COMBINED CATEGORIES OF CHILDREN WHOSE SPANISH AND ENGLISH ARE NOW APPROXIMATELY EQUAL, AND THOSE WHOSE ENGLISH IS STRONGLY APPROACHING THEIR SPANISH SCORE (MORE THAN 50% AS GREAT) REPRESENT 69% OF THE TOTAL GROUP.

CONCLUSION: The project goal of a gain of at least 5 points in the child's primary language by 50% or more of the children was met and exceeded for the most recent group of children, covered by this evaluation. Average gains were approximately 50% higher than the project goal.

The goal of 50% or more of the children making at least a 5-point gain in their second language, was partially met as 41% made this much gain. The average gain, however, was 4.98, only .02 short of the 5.00 goal.

The analysis of gains in Spanish by children for whom Spanish is the dominant language over the last three years indicates that project children, after 100 days, average scores consistently higher than the norm group of comparable age. By 200 days attendance this superiority over the norm group is large enough to be statistically significant beyond the .01 level of chance occurrence. The project, therefore, seems to be achieving its goal of retaining and developing ability in Spanish for children for whom this is the primary language.

The analysis of gains in English by children who entered the project as Spanish dominant over the last three years shows that 96% have scores higher than 9 points (the classification for "negligible" knowledge of English), after 200 or more days, although 55% of these children entered the program

with "negligible" knowledge of English. Of this three-year evaluation group, 32% (almost one-third) have reached the project's long-term goal of having children equally competent in English and Spanish, and able to benefit from instruction in either language. Another 37% (for 69% overall) is approaching this goal, having scores in English which are now 50% more of their score in Spanish on the PPVT. The program seems to be having a significant effect, therefore, in giving Spanish speaking children communication skills in English.

3. How Well Are Children Learning Math Concepts?

GOAL: Project students demonstrate growth in math concepts as measured by the Wide Range Achievement Test, subtest on math.

ANALYSIS: The Wide Range Achievement Test, math subsection, is administered to children individually, with instructions given in the child's primary language.

Pretests are given within 30 days after the child's initial enrollment, and subsequent tests given at calendar points in the year preceding each half-year evaluation, provided that the child has attended at least 40 days since the pretest.

The Wide Range Achievement Test is normed to a national sample and has "grade equivalent" norms based on the child's grade placement, and the month in the school year. Using age to correspond to the grade placement, and the month of testing to determine the month in the school year, actual scores are compared to the "expected" score, based on the grade equivalent norms. The percentage of children whose actual score is the same or greater than the "expected" score for the grade level and month in the school year is reported in the analysis reporting number of children "at or above grade level."

For this analysis, the children in the evaluation group (tested September to December, 1974) are divided into subgroups by grade level based on age, and by whether they have attended the program 100 days or 200+ days. For each grade level a norm group is also analyzed, consisting of all children pretested within the 30-day limit since the project began using this test, in 1973. The percentage of children at or above grade level is calculated for each subgroup in which there are six or more children, to see if the percentage increases with increased periods of program attendance.

Another type of analysis concerns the gains made by children in their "grade equivalent" scores, e.g., how many months increase (or decrease) has taken place from pretest to posttest. This increase is compared to the number of 20-day periods of attendance in the program from pretest to posttest, with the project goal of an increase of one month in grade equivalent score for each 20-day period of project attendance.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: For the analysis of children who are "at or above grade level" the project goal is met if the percentage of children at or above grade level within each grade level increases with each increase in attendance in the program, provided there are at least six children with scores to be analyzed in the subgroup.

For the analysis of gains in grade equivalent score, the criteria are met if 50% or more of the children have gained at least one month in grade equivalent score for each period of 20 days attendance from pre- to posttest.

FINDINGS: Table 5 below shows the percentage of children whose actual scores on the math section of the Wide Range Achievement Test are at or above grade level, based on national norms.

TABLE 5

MATH SCORES--PERCENTAGE OF CHILDREN AT OR ABOVE GRADE LEVEL BASED ON GRADE EQUIVALENT NORMS FOR THE WIDE RANGE ACHIEVEMENT TEST

Age Group	Attendance in Program					
	Norm Group Under 30 Days		100 Days		200+ Days	
Nursery (3-year-olds)	N=44	100%	N=8	100%	N=3	100%
Pre-kindergarten (4-year-olds)	N=28	71%	N=12	83%	N=5	100%
Kindergarten (5-year-olds)	N=14	71%	N=15	93%	N=10	100%
First Grade (6-year-olds)	N=10	50%	N=8	88%	N=1	100%

N = number in subgroup.

SUMMARY OF FINDINGS, TABLE 5:

1. WITH INCREASED PERIODS OF PROGRAM ATTENDANCE, THE PERCENTAGE OF CHILDREN AT OR ABOVE GRADE LEVEL INCREASES, EXCEPT WHEN THE PERCENTAGE HAS REACHED 100% AND CAN GO NO HIGHER.
2. BY 200 DAYS ATTENDANCE IN THE PROGRAM, 100% OF CHILDREN HAVE MATH SCORES WHICH ACCORDING TO NATIONAL NORMS WOULD PLACE THEM ABOVE GRADE LEVEL.

INTERPRETATION OF FINDINGS: The Wide Range Achievement Test was standardized with children aged 5 years and older. The expected scores used in the grade equivalent norms for preschool grade levels, therefore, represent a projection downward based on the slope of scores obtained by children from kindergarten up. This means the norms have a weak statistical support at this level. That the "expected" score is too low at the three-year-old level would seem evident from the fact that even the norm group achieved the expected score by 100%. The reader is therefore referred to later analysis in this section in which the mean raw scores for the various subgroups are compared statistically, as being a stronger confirmation of the superiority of the project children attending 100 and 200 days.

ADDITIONAL FINDINGS: Another type of analysis called for in the evaluation is based on the gains made by children in terms of the grade equivalent of their score on the math test. For this analysis, the criterion set was that at least 50% of the children would show an increase of at least one month in the grade equivalent of their score on the math test for every 20 days they had attended since their previous WRAT test. The size of the evaluation group for this analysis is larger because it includes any child who attended at least 40 days between tests, whereas the other types of analysis made the cut-off for inclusion in the evaluation group after 100 days attendance. The findings are presented below in Table 6.

TABLE 6

INCREASE IN GRADE EQUIVALENT RANKING BASED ON MATH SCORES FROM WIDE RANGE ACHIEVEMENT TEST RELATED TO LENGTH OF PROGRAM ATTENDANCE

Number of Children with Pre- and Post-tests on W.R.A.T.	Number who Gained at Least One Month in Grade Equivalent for Each 20 Days Attendance	Meets Project Goal Criteria
78	58 (74%)	Yes

SUMMARY OF FINDINGS, TABLE 6:

1. THE EVALUATION CRITERION WAS THAT AT LEAST 50% OF PROJECT CHILDREN WOULD SHOW A GRADE EQUIVALENT RANKING AT LEAST ONE MONTH HIGHER FOR EACH 20 DAYS THEY SPENT IN THE PROGRAM. THIS RATE OF GAIN WAS MET BY 74% OF THE CHILDREN, FAR EXCEEDING THE MINIMUM GOAL.

INTERPRETATION OF FINDINGS: As 20 days attendance is roughly the equivalent of one month of school, a gain of one month in grade equivalent provides a rough standard of whether progress is at a "normal" rate. As indicated, the overwhelming majority of students are showing an accelerated rate of gain in math for the period of actual attendance.

ADDITIONAL FINDINGS: Additional analysis of test scores is reported in Table 7. In this analysis the average (mean) raw score achieved by the different attendance subgroups is compared. A statistical test is used to see if the superiority of the children who have attended 100 and 200 days is large enough to be "statistically significant"--i.e., the possibility that this is not a project effect but the result of "chance" differences is less than 5 in 100.

TABLE 7

MATH SCORES--COMPARISON OF AVERAGE (MEAN) MATH SCORES ON THE WIDE RANGE ACHIEVEMENT TEST BY AGE AND PERIOD OF ATTENDANCE

Age Group	Attendance in Program					
	Norm Group Under 30 Days		100 Days		200+ Days	
3.0-3.11	N=44	3.59	N=8	7.25**	. . .	
4.0-4.11	N=28	5.61	N=12	9.25**	N=6	10.67**
5.0-5.11	N=14	8.29	N=15	15.27**	N=10	16.90**
6.0-6.11	N=10	15.40	N=8	19.50^{NS}	. . .	

N = number in the subgroup.

. . . indicates there were fewer than six children in the subgroup, so no analysis of scores was made.

** = the superiority of this score over that of the norm group is statistically significant at the .01 level.

NS = the difference between this score and the norm group is not large enough to be statistically significant above the .05 level.

SUMMARY OF FINDINGS, TABLE 7:

1. IN EVERY AGE GROUP, THE AVERAGE MATH SCORE INCREASES AS THE PERIOD OF ATTENDANCE INCREASES.
2. THE SUPERIORITY OF THREE-, FOUR-, AND FIVE-YEAR-OLD CHILDREN ATTENDING 100 AND 200 DAYS OVER THE NORM GROUP, WHICH REPRESENTS CHILDREN OF THE SAME AGE WITHOUT PROGRAM EXPERIENCE, IS SO GREAT THAT IT COULD RESULT FROM CHANCE LESS THAN ONE TIME IN 100.
3. THE AVERAGE SCORE IN MATH OF SIX-YEAR-OLD CHILDREN SHOWS THE GROUP WITH 100 DAYS ATTENDANCE SUPERIOR TO THE NORM GROUP OF THIS AGE, BUT THE DIFFERENCE IS NOT ENOUGH TO BE CONSIDERED STATISTICALLY SIGNIFICANT.

CONCLUSION: Comparison of the scores of project children to national norms shows an increased percentage of children who are "at or above grade level" for each increased period of participation in the program. In addition, 74% of the children show an increase in their grade equivalent score which exceeds the expected increase based on their period of attendance in the program. These two findings indicate that the program has met, and exceeded its goals for teaching of math concepts.

A further analysis of scores based on length of attendance in the program shows that even by 100 days, children have a superiority over the norm group without program experience which is large enough to be statistically significant at the .01 level. By 200 days this superiority is even greater.

All of these findings indicate that the academic program in math is very powerful. Project children enrolled as preschoolers begin school with a very significant superiority over children of similar age and background without benefit of such instruction.

4. How Well Are Children Learning Handwriting and Spelling Skills?

GOAL: Project students demonstrate growth in handwriting and spelling skills as measured by the Wide Range Achievement Test, subtest on spelling.

ANALYSIS: The test is administered individually, with instructions given in the child's primary language. Two types of analysis are called for in the evaluation design: (1) the percentage of children at or above grade level, and (2) the percentage of children increasing their grade equivalent score by at least one month for every 20 days of attendance in the program between tests.

The process of analysis is the same as that described in the previous section concerning the math subtest of the WRAT. The reader is referred to that discussion.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: For the first analysis described above, the goal is met if the percentage of children at or above grade level within each age group increases with each increase in attendance in the program, provided there are at least six children with scores to be analyzed in the subgroup.

For the second analysis described above, the goal is met if 50% or more of the children have gained at least one month in grade equivalent score for each period of 20 days attendance from pre- to posttests.

FINDINGS: Table 8 shows the percentage of children whose actual score on the spelling subtest of the Wide Range Achievement Test is equal to or higher than the score expected for his grade level based on the national norms. Although the subtest is called "spelling," at the preschool level it is based on the ability to copy marks and make letters and is therefore closely related to handwriting skills, and is used as a measure of the effectiveness of the handwriting curriculum.

TABLE 8

SPELLING SCORES--PERCENTAGE OF CHILDREN AT OR ABOVE GRADE LEVEL BASED ON GRADE EQUIVALENT NORMS FOR THE WIDE RANGE ACHIEVEMENT TEST

Age Group	Attendance in Program					
	Norm Group Under 30 Days		100 Days Attendance		200 Days Attendance	
Nursery (3-year-olds)	N=44	32%	N=8	100%	N=2	100%
Pre-kindergarten (4-year-olds)	N=28	36%	N=12	83%	N=6	100%
Kindergarten (5-year-olds)	N=14	29%	N=15	73%	N=10	100%
First Grade (6-year-olds)	N=9	11%	N=8	0%	N=1	100%

SUMMARY OF FINDINGS, TABLE 8:

1. THE PERCENTAGE OF CHILDREN WHOSE SCORE PLACES THEM AT OR ABOVE THE EXPECTED SCORE FOR THEIR GRADE LEVEL INCREASES WITH LONGER PERIODS OF PROGRAM ATTENDANCE FOR THREE-, FOUR-, AND FIVE-YEAR-OLDS, IN KEEPING WITH THE PROJECT GOAL.
2. IN FIRST GRADE, ALL CHILDREN EXCEPT ONE IN THE NORM GROUP ARE BELOW GRADE LEVEL. THIS MEANS THAT THE PERCENTAGE ABOVE GRADE LEVEL IN THESE TWO GROUPS GOES FROM 11% TO 0%, OPPOSITE TO THE DIRECTION EXPECTED FOR THE EVALUATION.
3. ALL CHILDREN WITH 200 DAYS ATTENDANCE HAVE SCORES WHICH ARE AT OR ABOVE THAT EXPECTED FOR THEIR AGE GROUP.

INTERPRETATION OF FINDINGS: The preschool level of this test is based on handwriting skills, which are taught in the program. By the first grade the test content includes spelling of words. The program teaches reading, but it does not teach spelling at the first grade level so differences between the groups are not related to the instructional program. In addition, the handwriting curriculum is not taught in the school age program because we have less time with these children.

ADDITIONAL FINDINGS: Based on grade equivalent scores, the project goal was that children from pre- to posttest would gain one or more months in the grade equivalent score for each 20 days attendance in the program. The criterion set was that 50% or more of the children in the evaluation group would meet this goal. Table 9 below presents findings on this objective.

TABLE 9

HANDWRITING OR SPELLING--INCREASE IN GRADE EQUIVALENT RANKING BASED ON SCORES FROM THE SPELLING SUBTEST OF THE WIDE RANGE ACHIEVEMENT TEST RELATED TO LENGTH OF PROGRAM ATTENDANCE

Number of Children With Pre- and Post-tests on WRAT	Number Who Gained at Least one Month in GE for Each 20 Days Attendance	Meets Project Goal Criteria?
78	44 (56%)	Yes

GE = grade equivalent (based on month of school year).

SUMMARY OF FINDINGS, TABLE 9:

1. FORTY-FOUR CHILDREN, WHICH IS 56% OF THE CHILDREN IN THE EVALUATION GROUP, INCREASED THEIR SCORES ENOUGH TO RAISE THEIR GRADE EQUIVALENT RANKING BY AT LEAST ONE MONTH FOR EVERY 20 DAYS ATTENDANCE BETWEEN TESTS. THIS MEETS THE PROJECT GOAL.

INTERPRETATION OF FINDINGS: This analysis was intended only as a very rough measure of the children's rate of gain, as 20 days is the equivalent of one month of schooling, and the grade equivalent norms are based on scores achieved by a national sample in different months of the school year.

ADDITIONAL FINDINGS: Both of the last two tables related the scores of project children to the grade equivalency scale developed for the Wide Range Achievement Test. The following analysis compares the average raw scores of children in the norm group (without program participation) with children of the same age who have attended 100 and 200 days. This shows the same pattern as the comparison of the percentage of children at or above grade level; namely each group with higher attendance shows a higher average score among three-, four-, and five-year-olds, with a slight reversal among six-year-old first graders. However, the differences in scores is analyzed statistically to see whether it is significant (meaning that the differences between the groups might occur by chance less than 5 times in 100). This provides a much stronger confirmation of the superiority of project children after 100 and 200 days attendance.

TABLE 10

HANDWRITING OR SPELLING--COMPARISON OF AVERAGE (MEAN) SPELLING SCORES ON THE WIDE RANGE ACHIEVEMENT TEST, BY AGE, AND PERIOD OF ATTENDANCE

Age Group	Attendance in Program					
	Norm Group Under 30 Days		100 Days		200 Days	
3.0-3.11	N=44	.61	N=8	3.25**	. . .	
4.0-4.11	N=28	3.00	N=12	5.92*	N=6	9.33**
5.0-5.11	N=14	6.36	N=15	12.53**	N=10	17.60**
6.0-6.11	N=9	17.0	N=8	16.75^{NS}	. . .	

N = number in subgroup.

. . . indicates there were fewer than six children in the subgroup, so no analysis of scores was made.

* indicates the difference between this score and the norm group is significant at the .05 level (would occur by chance less than 5 times in 100).

** indicates the difference between this score and the norm group is significant at the .01 level (would occur by chance less than 1 time in 100).

NS = the difference between this score and the norm group is not statistically significant.

SUMMARY OF FINDINGS, TABLE 10:

1. THE EFFECT OF THE HANDWRITING CURRICULUM IS SHOWN BY THE FACT THAT THE AVERAGE SCORE INCREASES SHARPLY THE LONGER THE PERIOD OF ATTENDANCE, FOR THREE-, FOUR-, AND FIVE-YEAR-OLD CHILDREN. (AT THIS AGE LEVEL THE TEST IS MORE OF HANDWRITING SKILLS THAN OF SPELLING.)
2. THE SUPERIORITY OF THE CHILDREN WITH 100 AND 200 DAYS ATTENDANCE OVER THE NORM GROUP IS STATISTICALLY SIGNIFICANT, E.G., BEYOND THE LEVEL WHEN IT COULD BE ATTRIBUTED TO CHANCE.
3. THE DIFFERENCE BETWEEN THE NORM GROUP AND CHILDREN WITH 100 DAYS ATTENDANCE FOR SIX-YEAR-OLDS IS NOT STATISTICALLY SIGNIFICANT. (THIS IS NOT UNEXPECTED AS NEITHER HANDWRITING NOR SPELLING ARE SPECIFICALLY TAUGHT AT THE FIRST GRADE LEVEL.)

CONCLUSION: The handwriting program at the preschool level appears to be very effective. The program met its goals for each of the types of analysis called for in the evaluation plan with all preschool age groups. The program does not teach spelling or handwriting at the first grade level, and the scores of these children were essentially the same as those of the norm group for this subject area.

5. How Well Are Children Learning Reading Skills?

GOAL: Project students demonstrate growth in reading skills as measured by the Wide Range AchievementTest, subtest on reading.

ANALYSIS: The Wide Range Achievement Test is administered individually to students, the reading subtest administered in English.

The analysis used in the evaluation of reading gains is the same as that used with the math and spelling subtests of the WRAT, and the reader is referred to the description included earlier in objective 3 regarding math.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: The percentage of children scoring at or above grade level will increase with attendance in the program. National norms on the WRAT indicate which is the average score received by children in various months of the school year for grade levels from Nursery (3-year-olds) upward. This score is considered the "expected" score for children tested in that month of that grade, and children whose actual score is as high or higher than their "expected" score are considered to be "at or above grade level."

FINDINGS: Table 11 below compares the percentage of children who are at or above grade level in the norm group (less than 30 days attendance) and in groups made up of children who have attended over 100, or over 200 days, by age groups.

There are fewer children in the norm group and in the 200 day subgroup for reading than for math and handwriting because the reading program was begun several months later than the other two subject areas, and the reading subtest was not included in the WRAT testing until approximately one year ago.

TABLE 11

READING SCORES--PERCENTAGE OF CHILDREN AT OR ABOVE GRADE LEVEL BASED ON GRADE EQUIVALENT NORMS FOR THE WIDE RANGE ACHIEVEMENT TEST

Age Group	Attendance in Program					
	Norm Group Under 30 Days		100 Days Attendance		200 Days Attendance	
Nursery (3-year-olds)	N=13	77%	N=8	100%	N=1	100%
Pre-kindergarten (4-year-olds)	N=14	79%	N=16	100%	N=3	100%
Kindergarten (5-year-olds)	N=6	67%	N=20	95%	N=3	100%
First Grade (6-year-olds)	N=8	25%	N=8	13%	N=1	100%

N = number in subgroup.

SUMMARY OF FINDINGS, TABLE 11:

1. THE PERCENTAGE OF CHILDREN WITH SCORES IN READING AT OR ABOVE GRADE LEVEL IS HIGHER FOR CHILDREN WITH 100 AND 200 DAYS OF ATTENDANCE THAN IN THE NORM GROUP FOR THREE-, FOUR-, AND FIVE-YEAR-OLDS.
2. MOST FIRST GRADE CHILDREN IN BOTH NORM GROUP AND WITH 100 DAYS ATTENDANCE ARE BELOW GRADE LEVEL; THE PERCENTAGE ABOVE FAVORS THE NORM GROUP.
3. ALL CHILDREN WITH 200 OR MORE DAYS ATTENDANCE HAVE READING SCORES WHICH WOULD PLACE THEM ABOVE THE NATIONAL NORMS.

ADDITIONAL FINDINGS: The rate of increase in reading skills was evaluated by seeing how many children showed an increase of at least one month in the grade equivalent of their reading score for each 20 days attendance between pre- and posttest. For this analysis all tests were evaluated in which there had been at least 40 days

attendance from pre- to posttest. The grade equivalent norms are based on the score most frequently achieved by children of that year and month in school. Below 5 years of age these are a projection downward of the scores of children aged 5 and older.

TABLE 12

READING--INCREASES IN GRADE EQUIVALENT RANKING BASED ON READING SCORES FROM WIDE RANGE ACHIEVEMENT TEST RELATED TO LENGTH OF PROGRAM ATTENDANCE

Number of Children with Pre- and Post-tests on WRAT	Number who Gained at Least One Month in Grade Equivalent for Each 20 Days Attendance	Meets Project Goal Criteria?
54	29 (54%)	Yes

SUMMARY OF FINDINGS, TABLE 12:

1. MORE THAN 50% (THE PROJECT GOAL) OF CHILDREN SHOWED AN ACCELERATED RATE OF GAIN IN READING. THEIR GRADE EQUIVALENT RANKING INCREASED BY ONE MONTH OR MORE FOR EVERY 20 DAYS PROGRAM ATTENDANCE.

ADDITIONAL FINDINGS: To provide a further means of checking whether there is a statistically valid superiority among project children with 100 or more days attendance, over children from the norm group (pretested before 30 days attendance and therefore showing little or no effect from the program) a comparison based on average raw scores for each attendance subgroup is shown in Table 13 below.

TABLE 13

READING SCORES--COMPARISON OF AVERAGE (MEAN) READING SCORES ON THE WIDE RANGE ACHIEVEMENT TEST BY AGE AND PERIOD OF ATTENDANCE

Age Group	Attendance in Program				
	Norm Group Under 30 Days		100 Days Attendance		200 Days Attendance
3.0-3.11	N=13	2.62	N=14	7.38**	. . .
4.0-4.11	N=14	6.29	N=16	10.25*	. . .
5.0-5.11	N=6	11.33	N=20	17.15^{NS}	. . .
6.0-6.11	N=8	17.75	N=8	16.13^{NS}	. . .

N = number in subgroup.

. . . indicates there were less than six children in subgroup so scores were not analyzed.

** = the superiority of this score over the norm group is statistically significant at the .01 level (might be the result of chance less than 1 time in 100).

* = the superiority of this score over the norm group is statistically significant at the .05 level (might be the result of chance less than 5 times in 100).

NS = the difference between this score and the norm group score is not statistically significant.

SUMMARY OF FINDINGS, TABLE 13:

1. THE SUPERIORITY OF THE THREE- AND FOUR-YEAR-OLD CHILDREN WITH PROGRAM EXPERIENCE OVER THE NORM GROUP FAR EXCEEDS THE POSSIBILITY THAT THIS DIFFERENCE COULD BE ATTRIBUTED TO CHANCE.
2. THE SUPERIORITY OF FIVE-YEAR-OLDS WITH PROGRAM EXPERIENCE OVER THE NORM GROUP IS LARGE, BUT BECAUSE OF THE SMALL SAMPLE SIZE AND THE VARIABILITY OF INDIVIDUAL SCORES, THIS DIFFERENCE IS NOT STATISTICALLY SIGNIFICANT.

3. THE SMALL DIFFERENCE BETWEEN AVERAGE SCORES OF THE NORM GROUP AND CHILDREN WITH 100 DAYS PROGRAM EXPERIENCE AMONG SIX-YEAR-OLDS IS NOT STATISTICALLY SIGNIFICANT.

INTERPRETATION OF FINDINGS: Reading is the last academic area to be introduced in the program so there is less than one year of testing in which the subtest in reading has been given. At this evaluation, the sample size is therefore much smaller for this subject area than for the academic areas of math and handwriting. There are not enough children in the 200-day attendance category to evaluate statistically, reporting averages of scores in the subgroup. The small number of children with 200 days attendance was reported for all three academic areas, even where it was less than six, on the tables indicating the percentage of children "at or above grade level" since this percentage did not involve any averaging. In all subject areas, including reading, 100% of the scores of children with 200 days attendance was "at or above grade level." Likewise in math and in spelling the difference between children with program experience and those in the norm group was statistically significant at the highest level (.01 meaning 1 in 100 possibility of this difference occurring by chance). It appears that the 200-day attendance period is required to firmly establish program benefits.

CONCLUSION: The majority of children are showing a rate of gain in reading which meets project goals. The percentage of children whose actual score gives them a grade equivalent ranking at or above that expected for their age increases with the length of project attendance in three out of the four age groups reported, and is 100% at all age groups by 200 days attendance. The superiority of children with 100 days program attendance over the norm group is statistically significant at three and four years of age. Differences between children with 100 days attendance and the norm group are not statistically significant at five and six years of age.

6. How Well Are Children Learning Cultural Heritage Concepts?

GOAL: Project students demonstrate understanding of cultural heritage concepts, as measured by unit mastery tests.

Evaluation Note: Mastery tests based on cultural heritage materials developed by the project were not completed and initiated into use at all sites until January, 1975. Therefore, there are no findings on this objective which can be reported for this mid-program year evaluation. Findings, based on the portion of the year these materials have been in use, will be reported in the end of the program year evaluation.

1.0 INSTRUCTIONAL COMPONENT (PROCESS OBJECTIVES)

1. Does the Rate of Progress Through Academic Curriculum Materials Meet Project Goals?

GOAL: Teachers will provide instruction using the following programmed instructional materials (or substitute materials approved by the educational director) at a pace whereby at least 50% of the students advance by at least one level, or unit, of lessons for every days cumulative attendance.

Singer "Sets and Numbers" math, or project developed premath activities.

Lyons and Carnahan, "Write and See" handwriting (or an appropriate substitute as this material is going out of print), and project developed pre-handwriting activities.

Phonics Primer and Sullivan Reading, or project developed pre-reading activities.

ANALYSIS: The evaluation group was defined as those children with pre- and post-WRAT tests. A roster of these children was developed with their attendance between tests indicated in 20-day units, to the nearest unit. The difference between their curriculum placement at posttest, and at pretest was displayed next to the curriculum units. From this a calculation was made of the number and percentage of children who had completed at least one curriculum unit per attendance unit in math, handwriting (spelling), and reading.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: The objective is considered to be met if 50% of the children advanced by at least one curriculum unit per 20-day attendance unit, in each of the programmed curriculum areas.

FINDINGS:

TABLE 14

PROGRESS THROUGH CURRICULUM MATERIALS--NUMBER AND PERCENTAGE OF CHILDREN WHO COMPLETED AT LEAST ONE CURRICULUM UNIT FOR EACH 20 DAYS ATTENDANCE IN PROGRAM

Subject Area	No. in Evaluation Group	No. and % Completing at Least One Curriculum Unit Per 20 Days Attendance	Meets Project Goal?
Math	77	62 (81%)	Yes
Handwriting	42	29 (69%)	Yes
Reading	68	39 (57%)	Yes

The number in the evaluation group is different because many of the older children have completed the handwriting curriculum and some of the youngest children have not started reading.

SUMMARY OF FINDINGS, TABLE 14:

1. THE PROJECT MET ITS GOAL IN THE RATE OF PROGRESS BY CHILDREN THROUGH CURRICULUM MATERIALS IN ALL THREE ACADEMIC AREAS.
2. THE PERCENTAGE OF CHILDREN MAINTAINING A GOOD RATE OF PROGRESS THROUGH CURRICULUM UNITS WAS HIGHEST IN MATH.

CONCLUSION: Presentation of curriculum materials by teachers has been at the rate established in the project goals.

2. Does The Rate of Progress Through Language Curriculum Materials Meet Project Goals?

GOAL: Teachers will provide concept and language lessons at a rate whereby at least 50% of the students will advance by at least one level for every 20 days cumulative attendance in the program.

Evaluation Note: The programmed language curriculum materials were just being phased in during the first half of this program year, with all sites using them by November, 1974. Findings on this objective, therefore, are not available for this mid-program year evaluation, and will be reported in the evaluation at the end of the program year.

3. Are Teachers Presenting Cultural Heritage Lessons?

GOAL: Teachers will provide cultural heritage lessons on at least three out of every four weeks of project operation.

ANALYSIS: A roster of teachers was developed followed by the weeks during which this particular teacher taught in the program. The weeks in which cultural heritage lessons were reported was entered and from this the number and percentage of teachers offering lessons in at least three out of every four weeks was determined.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: Criterion is considered met if 100% of teachers provide lessons at a frequency of three out of every four weeks.

FINDINGS:

TABLE 15

CULTURAL HERITAGE LESSONS--NUMBER AND PERCENTAGE OF TEACHERS OFFERING CULTURAL HERITAGE LESSONS IN THREE OUT OF EVERY FOUR WEEKS THEY TAUGHT

Number of Teachers Providing Lessons for 4 Weeks or More From July-December, 1974	Number and Percentage Reporting Cultural Heritage Lessons Given in 3 Out of 4 Weeks	Meets Project Goal?
25	12 (48%)	No

SUMMARY OF FINDINGS, TABLE 15:

1. Only 48% of the project teachers reported giving cultural heritage lessons in three out of every four weeks of program operation, which does not meet the project goal.

INTERPRETATION OF FINDINGS: From site visit information, it is clear that much more in the way of cultural heritage lessons were offered than is reflected in the above findings. The primary problem seems to have been in lack of reporting.

There was also a division by center on this aspect of the program. In the year-round center at Moses Lake, 100% of the teachers met this goal.

The project has taken some steps which should improve this aspect of the program. One of these has been the development of a cultural heritage training unit for use in the in-service training program. Another has been development of kits for teacher use which make the cultural heritage presentations much less time consuming in teacher preparation. Another has been holding of workshops at all sites on cultural heritage and how to use the newly developed mastery tests for the cultural heritage units during January, 1975.

CONCLUSION: Approximately half the project teachers reported cultural heritage lessons given in three out of every four weeks, which does not meet the project goal.

A number of steps were reported which have been taken to bring the program up to its goals in regard to teaching of cultural heritage lessons.

4. Are Teachers Using the Recommended Teaching Methods?

GOAL: Teachers will use teaching processes as measured by classroom observational measures on:
skills necessary for dual language teaching
skills necessary for motivating active learning
with 80% of teachers meeting criterion after three months of classroom experience.

Evaluation Note: The dual language teaching observation instrument had to be revised to go with the new language curriculum phased into use during the first half of this program year. The instrument on motivating active learning has also been revised. So this objective will be evaluated in the end of program year evaluation based on use of these two revised instruments.

TABLE 16

SUMMARY OF INSTRUCTIONAL COMPONENT OBJECTIVES

	Exceeded	Met	Partially Met	Not Met
Goals for Educational Outcomes:				
1. Learn preschool concepts	X	X		
2. Gain in primary language	X	X		
Gain in second language			X	
3. Gain in math skills	X	X		
4. Gain in handwriting	X	X	X*	
5. Gain in reading	X	X	X*	
6. Learn cultural concepts	(To be evaluated end of year)**			
Goals for Educational Processes:				
1. Prescribed pace in math, handwriting, reading curriculum	X	X		
2. Language lesson schedule	(To be evaluated end of year)**			
3. Cultural heritage lesson schedule			X	
4. Use of teaching processes	(To be evaluated end of year)**			

*Partially met by first grade children.

**Because of midyear change of materials, or delayed development of evaluation instruments.

2.0 STAFF DEVELOPMENT COMPONENT

1. Have Teachers Mastered Skills Through In-service Training?

GOAL: Teachers will achieve at least 75% mastery level on checklists completing in-service training units.

ANALYSIS: A roster of teachers is maintained, with the date of their initial employment. Throughout the year in-service training is continuous. Each training unit consists of a series of observations (formally recorded) of a teacher on a given set of teaching skills. Items on the checklist are marked off as achieved in formal observations, and when at least a 75% score is achieved on a checklist a training unit is considered complete. A conference is held, which serves as a summary of the teaching skills in that unit, after which the checklist is submitted to the evaluator. The date and score are entered on the roster of teachers.

At the time of evaluation the roster is examined to see if each teacher employed two months or longer has completed at least one checklist.

CRITERIA FOR ACHIEVEMENT OF OBJECTIVE: Criterion is considered met if every teacher has completed at least one checklist at criterion level except teachers employed in the program less than two months during the evaluation period.

FINDINGS: For the period July, 1974 through December, 1974 training took place as indicated on Table 17.

TABLE 17

MASTERY OF TRAINING UNITS

Center	Number of Teachers Employed Two Months or Longer	Number and Percentage Completing At Least One Checklist At 75% Mastery Level	Meets Project Goal?
Moses Lake	10	5 (50%)	No
Connell	6	0 (0%)	No
Texas-Mobile	9	6 (67%)	No
Total Project	25	11 (44%)	No

SUMMARY OF FINDINGS, TABLE 17:

1. LESS THAN HALF OF THE TEACHERS IN THE PROGRAM COMPLETED A TRAINING UNIT DURING THE FIRST HALF OF THIS PROGRAM YEAR.

INTERPRETATION OF FINDINGS: The number of checklist completions reported for this objective would seem to indicate a wider variation in the pace of training between centers than is actually the case. The training process calls for presentations and formal observations to be carried out. The termination of a training unit is the checklist. During the first half of this program year the formal observations submitted indicated that training was going on at all centers as follows:

Moses Lake--43 formal observations completed (16 checklists)

Connell--34 formal observations completed (no checklists)

Texas Mobile--34 formal observations completed (9 checklists)

The timing of this evaluation caught a number of training units underway but not yet completed at Connell. The report is therefore, to this extent, misleading.

Overall, however, the training pace has slowed in the first half of this program year, as indicated by the evaluation findings reported. One problem is that the training units developed to go with the new curriculum in use in the academic area were too massive. Far too many teaching skills were included in each one. The result of this was that an initial presentation frequently took five or six training sessions to complete, instead of one or two as had been the case with earlier training materials developed. Similarly, observations would require several days because not all items on the observation form could be observed and recorded during the length of one lesson period. This meant that it was particularly difficult to complete training in cases where training had to be individualized. This would be the case with a new teacher who needed material other teachers had already completed. And it was the case with the mobile program when teachers were working in isolated areas, and the trainer had to work with this one teacher by herself on visits scheduled to each site on a rotating basis. The corrective action undertaken to deal with this problem has been revision of training units, breaking several of them into two or three parts to be handled serially.

Another problem has been that the trainers themselves were inadequately prepared to present some of the teaching skills and to serve as the on-site model. When this was the case, the training had to wait on the arrival of a resource trainer who came in for periodic visits. Because initial presentations were sometimes inadequate for teachers to get a good model of what was expected of them, trainers had to do many more teaching performance evaluations before teachers had mastered the teaching skills to a passing level. The corrective action that has been undertaken on this problem is scheduling trainer-training conferences on the different training units. The project is also having the resource trainer concentrate attention on upgrading the skills of the on-site trainers, instead of doing so much observation and training directly with the teachers. In the long run this will result in a more efficient training program.

CONCLUSION: During the first half of this program year, the rate of completion of in-service training has fallen considerably below the project goal. Corrective actions are underway which should do much to improve the record by the final evaluation for this program year.

2. Are Teachers Continuing Academic Training?

GOAL: At least 80% of project staff will be enrolled for high school GED courses, or college courses, to further their academic training.

ANALYSIS: A roster of full-time staff is used with a check-off procedure denoting enrollment in college classes, or in GED classes. This is maintained by the project manager and provided at evaluation dates to the evaluator by memo.

CRITERIA FOR ACHIEVEMENT OF GOAL: The objective is considered met if at least 80% of full-time staff is enrolled for academic training during the evaluation period.

FINDINGS: Table 18, below, reports the number of full-time staff who were employed at the start of the fall quarter, September, 1974, and the number who enrolled in college courses or high school GED training during the fall.

TABLE 18

FULL-TIME STAFF ENROLLED IN COLLEGE COURSES OR HIGH SCHOOL GED CLASSES, SEPTEMBER-DECEMBER, 1974

Staff Category	Total Enrolled in College Courses	Enrolled in GED	Not Enrolled in Academic Courses
Educ. Director			1 (Has M.A.)
Trainers	2		2 (Have B.A.)
Site Coordinators	1		1
Secretaries	1		1
Teachers	16	2	0
Total Project	20	2	5
Percentage of total full-time staff enrolled in continuing academic work:		81%	

SUMMARY OF FINDINGS, TABLE 18:

1. Of the teachers in the project, 100% were continuing their academic training through either GED work or college courses.

2. OF THE TOTAL FULL-TIME STAFF, 81% WERE CONTINUING ACADEMIC COURSES DURING THE FALL SEMESTER, WHICH MEETS THE PROJECT GOAL OF AT LEAST 80%.

CONCLUSION: The program, again this fall, met its goal for staff improvement through continued academic training, with 81% of full-time staff enrolled in college or GED classes.

2.0 STAFF DEVELOPMENT COMPONENT (PROCESS OBJECTIVES)

1. Does The Pace Of Training Meet Project Objectives?

GOAL: Teacher trainers will provide in-service training at a rate which will enable 80% of the teachers to complete a training unit for every two months of active employment.

ANALYSIS: A roster of teachers with the month of their employment is maintained. The months of active employment during the evaluation are determined from this. A training unit is noted by date of completion. A plus or minus designation indicates whether individual teachers have completed the required number of training units for the months they have worked. From this the percentage of teachers who have met the training criteria is determined.

CRITERIA FOR ACHIEVEMENT OF PROJECT GOAL: The criterion is considered met if 80% of teachers complete a training unit for every two months active employment.

FINDINGS: Table 19 below indicates the number of teachers who completed at least one training unit for each two months of employment.

TABLE 19

TEACHERS WHO COMPLETED TRAINING UNITS

Center	Number of Teachers Employed Two Months or Longer July-December, 1974	Number and Percentage Who Completed at Least One Training Unit Per Two Months Employment	Meets Project Goal?
Moses Lake	9	4 (44%)	No
Connell	6	0 (0%)	No
Texas-Mobile	9	2 (22%)	No
Total Project	24	6 (25%)	No

SUMMARY OF FINDINGS, TABLE 19:

1. Of the teachers employed two months or longer between July and December, 1974, six, or 25%, completed in-service training at the rate of at least one unit every two months.

INTERPRETATION OF FINDINGS: The reader is referred to the earlier discussion of problems in the training area, and corrections being undertaken to bring training up to the pace the program expects.

CONCLUSION: During the first half of this program year, the pace of training fell considerably below the project's goal.

2. Is The Project Helping Staff Continue Their Academic Education?

GOAL: Administrative staff will arrange academic training opportunities for staff, and provide counseling to encourage staff to continue their academic training.

ANALYSIS: The documentation of this objective consists of memos from the project manager concerning efforts directed toward obtaining appropriate academic opportunities.

CRITERIA FOR ACHIEVEMENT OF GOAL: Examination of the evidence provided of how the above activities were carried out.

FINDINGS: The project had people working at three levels of academic work during the fall of 1974.

Graduate: Imelda Guerra, trainer, through Antioch College completed a master's degree program. This was arranged entirely by field work (e.g., no on-campus courses required). Project staff assisted her in this work providing background and guidance on courses she completed in educational administration, curriculum, and evaluation.

Undergraduate: Each quarter, all teachers have been enrolled in college courses. These are taken through Columbia Basin Community College. The selection of courses, and overseeing of enrollment requirements, filing of grades, etc., is handled by the project manager. Courses are selected to coincide with in-service training units, but require additional work by teachers as well. Resource materials are sent out by the project manager. All classes are completed on a field work basis (e.g., no on-campus classes required). This past summer several teachers completed one year (45 credit hours) of work.

High School GED: The program has attempted to enroll staff who need their GED in courses offered to the public by other agencies. As these classes had not been available for two staff members who needed the GED, special tutoring was arranged at the center. Classes are held twice a week after work.

The project manager also investigated an undergraduate program through Antioch College which may be utilized (again on a field work basis) by staff who have credits beyond the limits of the community college,

but still do not have their B.A. degree. One staff member is considering this but none have as yet enrolled.

CONCLUSION: The project has devoted staff time to arranging appropriate academic opportunities through which employees may improve their skills, and has fully met the project objective.

TABLE 20

SUMMARY OF STAFF DEVELOPMENT COMPONENT OBJECTIVES

	Exceeded	Met	Partially Met	Not Met
Outcome objectives:				
1. Mastery of in-service training unit(s)			X	X
2. Staff continues academic studies		X		
Process objectives:				
1. Maintaining pace of in-service training			X	X
2. Arranging continuing academic training	X	X		

3.0 PARENT AND COMMUNITY INVOLVEMENT COMPONENT

1. Are Family Members Participating in Children's Educational Program?

GOAL: Family members equal to at least one-third the enrollment capacity at each site will participate in their children's educational program through (a) home teaching program, or (b) center instructional program, or (c) assisting with cultural heritage activities.

ANALYSIS: A roster is made up of parents employed in instructional program by site, and of parents participating in any of the three ways itemized above by site, at least up to the number required to determine that one-third the enrollment capacity of each center has participated.

CRITERIA FOR ACHIEVEMENT OF GOAL: Examination of roster above described to confirm that family members participating in the educational program in one of the three ways is at least equal to one-third the enrollment capacity at each site.

FINDINGS: Table 21 below summarizes the participation of family members related to enrolled children in educational activities for the children. Family members are not restricted to parents, but include any person who might be in the child's extended family; e.g., brother, sister, aunts, uncles, grandparents, etc., as well as parents. In the cultural background of the majority of children enrolled, the family relating to these children is an extended family, not just the nuclear family.

TABLE 21

PARTICIPATION BY FAMILY MEMBERS IN CHILDREN'S EDUCATIONAL ACTIVITIES DURING PERIOD JULY-DECEMBER, 1974

Site	Number of Family Members Participating in Educational Program	Percentage of Enrollment Capacity of Center	Meets Goal?
Moses Lake, WA	25	56%	Yes
Connell, WA	15	42%	Yes
Grulla, Texas and mobile sites	9	12%	No

Note: Enrollment capacity of centers is larger than in previous evaluations because it now includes the school-age component.

SUMMARY OF FINDINGS, TABLE 21:

1. THE PERCENTAGE OF FAMILY MEMBERS PARTICIPATING IN EDUCATIONAL ACTIVITIES AT MOSES LAKE IS 56%, NEARLY DOUBLE THE MINIMUM GOAL.
2. THE PERCENTAGE OF FAMILY MEMBERS PARTICIPATING IN EDUCATIONAL ACTIVITIES AT CONNELL IS 42%, WHICH MEETS AND EXCEEDS PROJECT GOALS.
3. IN GRULLA, TEXAS AND AT THE MOBILE SITES, PARTICIPATION DURING THE FIRST HALF OF THE PROGRAM YEAR WAS MUCH LESS THAN AT THE OTHER TWO SITES, APPROXIMATELY 12% OF ENROLLMENT CAPACITY AND BELOW THE GOAL.

INTERPRETATION OF FINDINGS: The project has enjoyed the services of a site coordinator stationed at Moses Lake, who works extremely hard at parent and family participation. The finding that this type of participation at Moses Lake far exceeds minimum goals is consistent with the past several evaluations. The trainer at Connell has major responsibility for outreach service in the past, but this fall has been assisted to some extent by the site coordinator who is now working

full-time between the two sites. The amount of parent participation in educational activities at Connell is somewhat higher than past evaluations (the goal is also higher as the enrollment has increased).

The responsibility of the site coordinator for the Texas and mobile sites has in the past concentrated in the area of facilities, supplies, and recruitment. This program, even in Texas, is a great distance from shopping centers (the nearest one a 34-mile round trip). And considering that it moves and sets up again six to eight times in a year--each move requiring work on the facility, new recruitment, establishing of lines of credit, locating of equipment, etc.--the attention to these needs has taken precedence over outreach to bring parents into the center for the educational program.

Since January, 1975, a new program for the involvement of parents has been undertaken at all sites, which is largely under the direction of the trainers with assistance by the site coordinator and educational director. This program is called "family fun nights" and involves parents in educational games with the children at the center. Because of this program, it is expected that the quota of participation by family members at all sites will have met the project goals by the end-of-the-year evaluation.

CONCLUSION: The project has met its goal for involvement of parents in educational activities for their children in the two Washington state permanent sites. The goal was not met during the first half of the program year in the Texas-mobile component.

2. How Have Families Participated in Program Management?

GOAL: Parents and community advisory groups will be active in program management decisions involving (a) organizational matters (voting for officers, meeting times, parent group activities, etc.); (b) review of proposals or work program changes; (c) personnel actions; (d) use of parent funds; (e) discussion of educational program and evaluations of progress.

ANALYSIS: Analysis for this objective involves examining the content of the minutes of parent-community advisory group meetings site by site, and classifying actions taken which fall into the categories listed above.

CRITERIA FOR ACHIEVEMENT OF GOAL: The objective is considered to have been met if meeting minutes from every site confirm action of the parent and community advisory group in at least four out of the five specified areas.

FINDINGS: A content analysis of the minutes of parent-community advisory group meetings from each site, for the period of July, 1974 through December, 1974 classified actions into the five categories shown in Table 22.

TABLE 22

CONTENT ANALYSIS OF PARENT-COMMUNITY ADVISORY GROUP MINUTES

Grulla	Connell	Moses Lake
(a) Organizational Matters (and Parent Activities)		
10/74 Replace board member	7/74 Setting meeting time	10/74 Elect officers
12/74 Plan to make lawyer available	11/74 Discuss how parent group could operate with consultant	11/74 Project to make aprons; Thanksgiving dinner for staff
(b) Review of Funding Proposals, Program Changes		
10/74 Discuss plans for school-age tutoring; new program	None reported (no new proposals developed during this time period)	10/74 Review funding sources with project manager, discuss proposal planning

TABLE 22.--Continued

Grulla	Connell	Moses Lake
	(c) Personnel Actions	
10/74 Discuss hiring of two teachers; one employee probation	None reported. None needed--one teacher resigned but was replaced by teacher reassigned from Moses Lake	10/74 Screen applicants, fill three positions (teachers and tester)
	(d) Use of Parent Funds	
12/74 Plan to start building center next year with $4,000 in parent fund	7/74 Discuss how to earn parent funds 10/74 Plan spend $400 for kitchen supplies and children's toys for exchange activities; committee to shop appointed	9/74 Discuss use of parent funds; how to earn 10/74 Agree to buy $35 worth of beans; Christmas gifts for children 12/74 Agree to two loans from parent fund money
(e) Discussion of the Educational Program, and Evaluations of Progress		
8/74 Discuss hours of operation; demonstration of methods and materials given 9/74 Date to close Prosser center, how handle bussing next year. Parents evaluation of program; appreciation to teachers 10/74 Discuss parent evenings and extending tutoring to first grade	7/74 Discuss how to involve fathers 8/74 Discuss fiesta for cultural heritage program 10/74 Discuss home teaching program 11/74 Discuss use of positive reinforcement teaching methods used, endorsed by parents	10/74 Planning parent participation in open house 11/74 Parents plan evening educational program with children

SUMMARY OF FINDINGS, TABLE 22:

1. THE PARENT-COMMUNITY ADVISORY GROUPS HAVE BEEN ACTIVE AT ALL SITES, MAKING DECISIONS ON PERSONNEL, PROGRAM, USE OF FUNDS, AND A VARIETY OF OTHER RELATED ACTIVITIES OUTLINED ABOVE.

CONCLUSION: The project has met its goal of active parent participation in program decision making.

3.0 PARENT AND COMMUNITY INVOLVEMENT COMPONENT PROCESS OBJECTIVES

1. Has Staff Solicited Parental Involvement?

GOAL: Project staff will solicit participation of parents in the children's educational program.

ANALYSIS: Examination of weekly reports submitted by project staff, minutes of meetings of parent advisory groups, and other memos regarding staff efforts to involve parents.

CRITERIA FOR ACHIEVEMENT OF GOAL: Judgment by the evaluator that significant efforts have been made to involve parents at each site based on documents mentioned above.

FINDINGS: Minutes from each site indicate repeated discussions of how parents may participate in the educational program. Site coordinator reports indicate parent contacts weekly. Natalie Rodriguez, a special consultant on parental involvement, assisted the parent groups at Connell and at Moses Lake plan how to increase involvement and means of organizing for effective action. Materials were developed and reproduced for parents to indicate how parents may work with their children at home or in the special "family fun night" programs initiated this year.

CONCLUSION: Staff at all sites have solicited parental involvement, in keeping with project objectives.

2. Does Staff Report Regularly to Parent Management Groups?

GOAL: Project staff will provide parent-advisory groups with the information needed to participate in program decisions by submission for review project proposals and evaluation reports, and by attendance regularly at parent advisory group meetings.

ANALYSIS: Listing of proposals prepared and evaluations issued for each evaluation period. Notations of materials for review. List of parent community advisory group meetings held for each site. Notation next to each of staff attending.

CRITERIA FOR DETERMINING ACHIEVEMENT OF GOAL: The objective is considered met if there is evidence of parent involvement in reviewing of every proposal and evaluation, and if at least some of the on-site staff attended each parent and community advisory group meeting held during the evaluation period.

FINDINGS: No proposals are developed during the July-December period. This objective will therefore be reported in the end-of-program-year evaluation in July, 1975.

Each of the evaluation reports issued during this period has been submitted to the president or chairman of the parent-community advisory group for each site as documented by covering letters.

Minutes of monthly meetings (plus special committee meetings) from sites indicate staff present at each parent community advisory meeting.

CONCLUSION: Staff has provided parent groups with written evaluations and with oral reports and opportunities to review the program operations, from which basis they have been able to participate fully in program decision making.

TABLE 23

SUMMARY OF PARENTAL INVOLVEMENT COMPONENT OBJECTIVES

	Exceeded	Met	Partially Met	Not Met
Outcome objectives:				
1. Parents participate in their children's education	X	X	X	
2. Parents participate in management of the project		X		
Process objectives:				
1. Staff will solicit parental involvement		X		
2. Staff reports to parent group		X		

4.0 MATERIALS DEVELOPMENT COMPONENT

1. Curriculum For Concept-Language Development.

GOAL: Project manager purchases or publishes programmed curriculum materials in concept-language development area. (PROCESS GOAL) Educational director and other staff assigned by him visit sites using programmed curriculum materials in concept/language development area and selects materials for project use.

STATUS REPORT: The Educational Director, his two trainers from the Texas site, the tester, and his evaluator visited Uvalde, Texas Follow Through project in March, 1974 to observe their language development curriculum. (The visit was preceded by examination of research reports on this curriculum and its effectiveness, and some examination of the materials.)

The Educational Director decided to adopt this curriculum and notified the project manager to order them. English language materials were purchased. Spanish language materials, initially, were provided us by the Uvalde project (which had obtained them from East Las Vegas, New Mexico) and these (non-copyrighted materials) were reproduced at the project's Media Center.

Related materials have also been developed and published by the project. Each of our curriculum areas has an achievement test. The children are tested on what they have learned by an outside tester. The teacher then uses the results to review and reteach concepts the child does not know. The Follow Through project has published such an achievement test in English. The Spanish version was developed by the project and published.

In order for teachers to review children on material which the achievement test showed them weak on, an alternate set of test items was developed and published. These are used by the teacher to check children's understanding after she has retaught materials the child missed on outside testing.

The Story Book, which is an important part of the curriculum, had never been produced in Spanish. The project is in the process of putting this in Spanish, after which it will be published for our use.

In addition, we have found that the Spanish materials developed in New Mexico changed the curriculum tasks in many important ways. We are revising the materials

to include the format we feel was important to learning the concepts, and to use the Spanish words more familiar to our target group of children. (The New Mexico Spanish, in general, derives from descendants of Spanish immigrants; the Spanish of our children from immigrants from Mexico--hence the word differences.)

CONCLUSION: Staff have carried out the search and selection process for language-concept development curriculum as in the goal. Materials have been published or purchased and been put into use at all sites. The development of ancillary materials (testing instruments) has also been carried out. Revision of the materials to adapt them to our target group is underway.

2. Pre-Academic Activities in Math, Handwriting, and Reading.

GOAL: Evaluator publishes curriculum tracking system for pre-academic activities in math, handwriting, and reading areas.

PROCESS GOAL: Curriculum resource trainer organized pre-academic activities into a sequential series from which the evaluator can develop a report system for tracking progress for children not yet into the programmed curriculum academic subject materials.

STATUS REPORT: The pre-academic material in math was developed by trainer, Imelda Guerra, as one part of the work toward her Master's Degree (as reported in the staff development component). She was assisted by the evaluator and curriculum resource trainer in defining the sequence of skills children needed.

The lowest level of the published math materials the program uses presumes the child has many skills; skill to circle objects, connect sets with lines, make X's in boxes. It presumes he knows how to count and recognize numerals. These are the "pre-academic" skills needed in math. Imelda developed a series of activities into a 92-page book. This includes identification of real objects to be used, procedures to be followed, and dialogue of the teacher. It also includes a mastery test by which the teacher can determine if the child is ready to go on. The skills are sequenced and programmed, and they tie in to the published materials we are using (going back and forth to provide children skills the published materials leave out).

These materials have been field tested at the Texas site this winter. They have not yet been put into use at all sites, and the curriculum reporting and tracking system needs still to be developed by the evaluator. In addition, the project needs to develop and publish an achievement test to go with these pre-academic skills which can be used by the tester to provide confirmation of the teacher testing that children have learned certain skills and concepts and are ready to progress.

In handwriting, the curriculum resource trainer developed some materials with an easier level of skills to precede work in the University of Kansas developed materials we have purchased. These are used as supplementary materials at present, as the project is looking for a replacement of the entire handwriting curriculum (the Write and See materials have gone out of print). The resource trainer and Educational Director are now examining another series (several were examined and rejected already). Something new will be adopted this Spring.

In reading, rather than developing pre-academic material, the introduction of children to the reading curriculum is simply postponed.

CONCLUSION: Pre-academic materials in math have been developed, are being field tested, and will need development of placement and achievement test instruments as well as the reporting and tracking system.

Supplementary materials for pre-academic skills are in use for handwriting, but no additional work to tie these in with the curriculum materials in use is being made because the entire handwriting curriculum may be replaced since existing materials are now out of print.

Pre-academic work in reading will not be developed, as the project decided that it was more appropriate to postpone introduction of reading until children were older.

3. Cultural Heritage Test Instruments.

GOAL: Evaluator publishes master tests for cultural heritage curriculum units.

PROCESS GOAL: Training staff develops mastery tests to accompany project developed cultural heritage curriculum lessons for use by program evaluator in place of current test of cultural knowledge.

STATUS REPORT: The two Washington State staff trainers developed mastery tests for 14 of the Mexican cultural heritage units developed by former staff member, Teresa Cruz.

In addition, materials developers have produced ten new cultural heritage units, with accompanying mastery tests, which add United States and other nation's cultural heritage units to our curriculum, so it is, by now, more "multi-cultural" than bicultural.

The project manager has reproduced testing notebooks for each teacher, as these are teacher given. A report system has been worked out. Workshops were held at all sites during January to train teachers in the test usage, and beginning February 1, 1975 the testing program is being fully implemented.

CONCLUSION: This objective has been fully carried out, materials published and put into use.

EVALUATOR NOTE: Some of the project funding for the school-age children comes from Washington State URRD grants. New regulations published by URRD indicate that an expected program outcome for bicultural projects in the future will include:

> "75% of participating students enrolled for six months or more will show statistically significant increases in awareness of the culture of the dominant participating population as measured by a test of significance between means on pre- and post-tests of instruments deemed appropriate by project staff and the state Superintendent of Public Instruction."

The State Office of the Superintendent has not indicated any tests which they recommend using. If the tests developed by this project are used, they will have to be used in a different way. At present, they

are used only as a posttest to measure mastery after presentation of material. We would have to devise a procedure for pretesting. The scoring system would have to be adapted to enable this type of statistical comparison.

It seems possible that the above regulation assumes the existence of test instruments that are not, in fact, available and that the regulation will be modified. If not, additional materials development in this area will be required.

4. Publishing Dissemination Information.

GOAL: Project Manager publishes or submits for publication dissemination materials on project's methods and accomplishments.

PROCESS GOAL: The program manager or evaluator writes or prepares materials for publication related to program objectives, approaches, and accomplishments.

STATUS REPORT: The Project Manager invited in photographers and reporters to the ceremonies at which project staff were presented their one-year certificates from Columbia Basin Community College. She also provided them with information on the project, and the training program through which this college work was done. This resulted in a series of articles in newspapers in the Yakima Valley, Columbia Basin area, and in Texas.

CONCLUSION: The project has disseminated information via newspapers on the project.

EVALUATOR NOTE: The project was reported by the United States Office of Education as a "Demonstrator-Dissemination" Model earlier this year. Since that time we have been flooded with requests for information on various aspects of the program, by phone and mail. We have not had the staff to respond to these requests, nor to develop material appropriate to the type of requests that have been received. If the pace of this type of request continues it will require some program adjustment to fulfill the responsibility we have as a demonstration program.

5. Publishing "Take Home" Materials for Parents To Use With Their Children In Each Subject Area.

GOAL: Project Manager publishes "take home" materials for parents to use with their children in each subject area.

PROCESS GOAL: The curriculum resource trainer selects or adapts workbook pages from programmed curriculum materials to reproduce for "take home" materials.

STATUS REPORT: The curriculum resource trainer and evaluator have met twice on this objective. The number of units to be developed has been determined (one per level) in math and in reading. Some work has been done on the format. However, most of the work on this objective remains to be carried out in the coming months.

CONCLUSION: The development of material is underway, but not complete. Nothing has been published yet.

6. Feedback Forms and System for Review of Curriculum.

GOAL: Evaluator publishes a form for recording feedback on curriculum use for review of new language/concept area materials, and pre-academic activities.

STATUS REPORT: Achievement tests have been developed in the language/concept area, and in math and reading. These enable information based on child performance of where teaching is weak. The evaluator has developed a system for reviewing these data, giving them to the center staff (teacher and trainer) and to training consultants who work at a dual level--suggesting appropriate remediation for individual children, and suggesting methods of helping the teacher do a more adequate job of getting the concepts across. A feedback loop is developed whereby remediation efforts are reported by the teacher, and performance re-evaluated on another round of testing.

This needs to be extended to the pre-academic curriculum materials within the next few months.

CONCLUSION: This feedback system is in operation in reference to the new language/concept area materials; also to math and reading curriculum. It has yet to be extended to the pre-academic math materials.

7. Staff Training Materials Published.

GOAL: Project Manager publishes at least six new units of staff training materials for use in the in-service training program.

PROCESS GOAL: Consultants or project staff will write at least six new units of staff training materials for use in the in-service training program.

STATUS REPORT: New training units developed thus far this program year include the following topics:

1. Cultural heritage.
2. Teaching the Primer: Using signals and maintaining attention.
3. Teaching the Primer: Teaching sequences (initial and correction).
4. Teaching the Primer: Testing, planning, and remediation.
5. Teaching Sullivan Reading: Teaching sequences.
6. Teaching Sullivan Reading: Planning, grouping, remediation.
7. Using positive reinforcement.
8. Use of the number line: Teaching simple addition.
9. Use of the number line: Teaching missing addend.
10. Use of the number line: Teaching simple subtracting.

Each of the above includes discussion training materials, a formal observation instrument, and a checklist for final evaluation of teaching performance.

CONCLUSION: The project has exceeded its goal in development of new training units.

TABLE 24

SUMMARY OF MATERIALS DEVELOPMENT COMPONENT OBJECTIVES

	Exceeded	Met	Partially Met	Not Met
Outcome objectives:				
1. Purchase or publish concept-language development curriculum		X		
2. Publish curriculum and tracking system for pre-academic activities			X	X[1]
3. Mastery tests published for Mexican cultural heritage activities	X[2]	X		
4. Publish newspaper articles		X		
5. Publish "take home" material for parent use				X[3]
6. Feedback system on language and pre-academic curriculum	X[4]	X		X[5]
7. Publish six units of teacher training materials	X	X		
Process objectives:				
1. Site visits to examine language curriculum		X		
2. Sequence pre-academic activities		X		X[1]
3. Develop mastery tests for cultural heritage		X		
4. Write articles		X		
5. Develop "take home" materials			X	
6. Write six units of teacher training materials	X	X		

[1]Met in math; objective changed in regard to handwriting and reading.

[2]Mastery tests also developed for new multi-cultural activities.

[3]Not due yet--publication will be on schedule.

[4]Feedback system also extended to math and reading.

[5]Feedback system not developed for pre-academic math materials yet.

5.0 MANAGEMENT COMPONENT FOR INTERSTATE DELIVERY SYSTEM

1. How Well Is the Program Able To Follow Children As They Move?

GOAL: At least 70% of the children enrolled in Texas during the winter of 1973-74 will be served again in one or more northern locations through implementation of a relocating delivery system.

ANALYSIS: A roster is made up of all children enrolled during the home base phase of the program during the winter of 1973-74. During the April through October months of mobile program operations, a checkoff of each additional enrollment in one of the mobile sites is made. From this the number and percentage are then calculated of children who were served in Texas and again in one or more northern locations.

CRITERIA FOR ACHIEVEMENT OF GOAL: The objective is considered to have been met if the percentage served in one or more northern locations represents at least 70% of those served in Texas during the winter 1973-74.

FINDINGS: Table 25 below shows the continuity rate achieved by the program for the past three years.

TABLE 25

PERCENTAGE OF CHILDREN SERVED IN TWO OR MORE LOCATIONS BY MOBILE PROGRAMS

Project Year	Number of Children Served at Home Base	Number and Percentage of Children Served at Home Base and Again in One or More Instream Sites
1971-72	78	56 (72%)
1972-73	77	57 (74%)
1973-74	76	46 (61%)

SUMMARY OF FINDINGS, TABLE 25:

1. THE MOBILE PROJECT SERVED 61% OF THE CHILDREN ENROLLED IN TEXAS DURING THE WINTER OF 1973-74 IN ONE OR MORE NORTHERN LOCATIONS. THIS IS SHORT OF THE PROJECT GOAL OF 70%, BASED ON CONTINUITY ACHIEVED IN THE FIRST TWO YEARS OF PROJECT OPERATION.

INTERPRETATION OF FINDINGS: Two teachers resigned just before the northern phase last summer because of family circumstances beyond their control. This left the project without staff for two areas we have previously served with the mobile program, and a number of children moving to these areas were left out. Because of the need to train teachers before asking them to offer educational services in isolated areas where they have very little support from professional staff, it is difficult to replace staff during the northern phase.

During the first year of program operations, the project design called for training of two teachers as substitutes who would work in the Texas centers, but not be assigned as regular staff for the program in the mobile phase unless needed as a substitute. Reduced funding eliminated this possibility in the following two years. During the winter of 1974-75, money obtained from manpower funds has again enabled the program to put on some staff during the winter program to be trained who may or may not be used in the north, but are available as replacements. It is expected that the continuity of service to children will again improve because of this back-up staff.

Although the continuity of service to children during the northern phase fell below the project's goal of 70%, this figure should be considered in perspective against the 19% which is the highest continuity rate achieved by other programs which have attempted to follow children on the move. (See October 1972 evaluation report.)

CONCLUSION: The project achieved 61% continuity of service to children in two or more sites instead of the 70% set as a goal.

2. How Well Has the Project Coordinated With Other Educational Agencies In Host Communities?

GOAL: The Program Manager, Educational Director, or Site Coordinators will coordinate services with educational agencies in each host community.

ANALYSIS: The Educational Director submits information on his contacts with other agencies on a periodic basis for the Project Manager. She maintains a running file on her coordinative contacts with other agencies.

Each Site Coordinator submits weekly reports on his coordinative contacts with other agencies (as well as with parents) to the Project Manager.

At evaluation time the Project Manager provides a summary of these contacts for each site to the project evaluator. From this a determination is made of whether the project has coordinated with other educational agencies in each "host" community to which the mobile program moves.

CRITERIA FOR DETERMINING ACHIEVEMENT OF GOAL: The criterion was met if there are coordinative contacts with educational agencies (either public school or preschool) in each host community.

FINDINGS: The listing below identifies and describes the coordinative contacts made in each host community to which the mobile program moved, for the first half of this program year.

PASCO, WASHINGTON: The public school offered a program for school-age migrant children during the summer. Staff contacted the principal, and worked out an arrangement whereby teachers from our program used space in the school to continue to work with our children enrolled in that program.

Preschool children attended a center sponsored by the Educational Institute for Rural Families, in Pasco. This was an agency funded to provide short-term day care services to preschool migrant children who could not be accommodated in year-round day care centers operating in the area. Our staff helped provide theirs with curriculum materials and training. Our teacher worked in their center, with time free to continue our special educational curriculum with La Grulla children.

When both these programs closed, our program continued to operate in a trailer provided by Green Giant Corporation at the farm labor camp housing most of the families from our mobile program.

PROSSER, WASHINGTON: Only one child from La Grulla was of school-age in the Prosser area, so our school-age component did not operate in this area. Contacts were made with the principal of the elementary school in nearby Grandview, who helped us obtain short-term staff for our Prosser center.

The Educational Institute for Rural Families operated a center in Prosser for migrant children. This program was in space shared by the Bilingual program. Our staff handled overall management of the facility, assisted in obtaining and training staff, and provided the educational services to children over age three. This included the children we were following and all other migrant children enrolled.

Demonstrations of curriculum were provided to the director and staff of the NRO sponsored Parent and Child Center at Grandview.

MABTON, WASHINGTON: Mabton School District cooperated with the Bilingual program to the extent of agreeing to be the formal applicant for funds from the Washington State URRD program. These funds were used to pay salaries of all staff, while they were in Washington State, who worked with the school-age children. They were managed by the Bilingual project in a delegate agency relationship.

At Mabton, staff provided service to migrant children referred by the school, in space provided by the school during May and June. After that time, the project manager and evaluator met twice with the Superintendent, Federal Project Officer, Principal of the elementary school, and kindergarten teaching staff about the possibility of getting a year-round program initiated. Follow-up phone calls and letters were sent. The School District did not initiate such a program, however, because of staffing problems.

Preschool children from the Mabton area were served for a short time in temporary facilities at Mabton; then they were bussed to the center at Prosser.

WALLA WALLA (COLLEGE PLACE), WASHINGTON: School-age children at this location were bussed to the school. They were provided supplementary educational services by our teacher before leaving for the school program, in space provided by the NRO day care center operating in the farm labor camp. Our staff worked with school officials on URRD proposal writing.

Preschool children were incorporated into the NRO day care center. Our staff provided theirs with some curriculum and training services. During part of the day our teacher, who worked in their center, took children from La Grulla for continuation of their curriculum. The remainder of the day they took part in the center program with our teacher assisting in any way she was requested.

UMATILLA, OREGON: At Umatilla our staff met with the principal of the elementary school. By mutual consent our teacher worked in the school. She took children out of regular classes on a mutually agreed upon schedule to continue tutoring in basic curriculum of the Bilingual program. She also, as time permitted, provided special tutoring (using school materials) to Spanish speaking children for whom they lacked Spanish speaking staff.

The preschool program operated from a farmhouse. There were no other preschool programs in this area for migrant children, so coordination was not possible at the preschool level.

HOOPESTON, ILLINOIS: Our teacher provided services to La Grulla children before the Texas Migrant Council center opened. After it opened, she worked in that center, having responsibility for an age group of migrant children with released time to continue our curriculum with the children we were following.

LA GRULLA, TEXAS: Extensive meetings took place during the Spring and the Fall with school officials from the elementary and secondary school in La Grulla, and with the Superintendent, Board, and officers of the Rio Grande City Independent School District. An arrangement was worked out whereby kindergarten children we planned to follow in the north were released to us for 45 minutes during the morning and another 45 minutes during the afternoon, for tutoring in the curriculum. First grade children were released to us serially in groups, for two-hour tutoring sessions. The same curriculum materials used with these school-age children in Texas will be used with them in the north.

SUMMARY OF FINDINGS:

1. COORDINATION WITH OTHER EDUCATIONAL AGENCIES PROVIDING SERVICES TO EITHER SCHOOL-AGE OR PRESCHOOL-AGE CHILDREN HAS TAKEN PLACE AT EVERY SITE.

2. IN ADDITION TO RECEIVING THE COOPERATION OF THESE AGENCIES TO ALLOW CONTINUED SERVICE TO THE CHILDREN WE FOLLOW, OUR PROGRAM HAS PROVIDED SUBSTANTIAL ASSISTANCE IN THE AREAS OF ADMINISTRATION, TRAINING, OR CURRICULUM AT MANY SITES.

CONCLUSION: The project has conscientiously coordinated its program with other agencies in every community in which the mobile program overlaps other agencies providing local services. This coordination has worked to the benefit of both local and mobile programs.

3. How Well Has The Program Monitored Far-Flung Project Operations?

GOAL: The program manager and evaluator will monitor far-flung project operations through weekly mail, phone, or site visit contact with each teacher, trainer, and the Educational Director or Site Coordinator at each operating site.

ANALYSIS: The evaluator receives weekly reports from all teachers (reporting progress level of all children in each curriculum track as well as the provision of bicultural activities). She also received weekly reports from all training staff (reporting training activities and other responsibilities). The Project Manager maintains weekly contact through phone or site visit with the Educational Director and Site Coordinators at each site.

For evaluations, the weekly check-in chart for the teacher and trainer reports serve as supporting evidence of contact. The Project Manager provides the evaluator with a log of weekly contact with each site by phone or site visit. The Project Manager also receives weekly reports from each Site Coordinator and provides a summary of these to the evaluator as supporting evidence for this objective.

CRITERIA FOR DETERMINING IF OBJECTIVE IS MET: The criterion was met if there were check-in reports or notations of phone or site visit contact for at least 80% of the weeks of project operation.

FINDINGS: The telephone log indicates weekly contacts were carried out with each site by the Project Manager except for a three-week period when she was on vacation.

The check-in chart indicates weekly reports from every teacher and every member of the training staff except for weeks in which they were on leave or in transit between operating sites.

CONCLUSION: Program monitoring controls are in operation which enable consistent carrying out of project objectives despite the complications of an interstate delivery system. The program goal was met in this area of management.

TABLE 26

SUMMARY OF MANAGEMENT COMPONENT FOR INTERSTATE DELIVERY SYSTEM

	Exceeded	Met	Partially Met	Not Met
1. Service to children in two or more communities			X	
2. Coordination with host communities	X	X		
3. Weekly monitoring of far-flung project operations	X	X		